The Hunterian Oration

ON

THEN AND NOW; OR, THE INFLUENCE OF MODERN SURGERY UPON MEDICAL PRACTICE.

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MR. PRESIDENT AND GENTLEMEN,—The responsibility of attempting to write and deliver an oration which shall be at once worthy of our godfather, worthy of your attention, and on a level with the many orations which have been delivered before the society is too great to allow me truthfully to express any earnest gratitude to you for electing me orator, but I can at any rate thank you for the honour which you would wish to confer upon me and can appreciate with a deep sense of respect the task with which you have rewarded my personal efforts on behalf of our society for a good many years.

Hunter was born, as I am informed, in 1728 and died in 1792, and during his lifetime showed such capability of concentrated and continuous work, such intellectual activity, such power of analysing and arranging facts and theories, that the influence of his existence has been felt, and felt strongly, down to our time and will continue to be felt long after we have passed away. None the less does it occur to me that it is hardly fair to him, however great and worthy he may have been, to keep on detailing annually all the incidents in his life, nor do I think that that is the type of oration which he would care to have maintained to keep his memory alive in our society. I have therefore chosen as my subject one which I hope may be as interesting to you as I am sure it would be to him could he but honour us to-night with his presence.

I have collected all the cases in which as a physician I have felt it right to call in the aid of a surgical colleague and I propose in some measure to discuss them to illustrate the enormous benefits which the profession has gained by the incalculably valuable discoveries of the last half-century or so. It is, of course, a commonplace nowadays to mention that I particularly refer to anæsthesia, antiseptics, and Roentgen ray photology. That they are beneficial discoveries, and that of a value utterly above computation, is of course quite beyond any shade of a shadow of doubt, but I would beg to be allowed to preface the real subject of my oration by a word or two, not of alarm or warning exactly, but of anxiety and caution, which may serve to raise in the mind of each one of us the question whether in our wholehearted enthusiasm for attractive novelties we may not in some degree be dangerously near to the risk of overstepping the boundaries between use and abuse. General anæsthesia, for instance, I care not whether produced by gas, chloroform, ether, the A.C.E. mixture, or combinations of any of them, has several times seemed to me to be responsible for something detrimental to the patient over and above the influence of the necessary manipulation of operative procedures; I have no doubt in my own mind, though mathematical proof of cause and effect would be difficult to give, that old quiescent foci of, or dormant tendencies to, disease have been lighted up into activity by the anæsthetic used to perform an operation. Quite recently I saw old tubercle of the lung started afresh *after* an operation for piles; the wound did splendidly and it seemed to me that the ether was the only attendant condition to which I could attribute the eruption of the smouldering mischief. Again, has not the anæsthetic a good deal to do with the deaths which are frequently put down to the shock of an operation in cases where this has been undertaken somewhat late, when the vital powers of the patient are at a low ebb? The subject of local anæsthesia in general surgery has received a good deal of attention abroad, and I would raise the question whether it could not find a wider field of application than it at present holds in exploratory operations. Lawson Tait and other abdominal surgeons have given us some reason to believe that the actual manipulation of internal organs is possibly painless. In the great field of antiseptics, too, in our craze for slaughtering microbes wherever and whenever we meet with them, are we not in some danger of destroying friends with foes and of paying too little attention to the soil on and in which these microbes grow and to the hostile influences with which the tissues, fluids, and cells of the body meet them? The futile efforts at cleansing the peritoneum after abdominal section is a case in point. Futile they must be, as my experience in the post-mortem room shows, when a hose at full pressure of the water company has failed to effect the purpose. Absolutely aseptic surgery is the acme of triumph of modern principles, and serum therapeutics bid fair to put a brilliant pinnacle even on the top of this; but in matters sanitary and hygienic I cannot help but feel that we are letting zeal outrun discretion and putting upon modern hypotheses a too great burden of administrative practice. I am sure that by boiling milk we rob it of some property or material that is most valuable, if not essential, to the growing infant, possibly also to the nutrition of the adult. 'Tis true that we destroy any tubercle or other noxious microbes in it, but to me it seems at least possible that this security against a chance invasion may be bought at too high a price. We are terribly afraid of allowing tubercle bacilli an entrance to the stomach in this manner and yet I have not the slightest doubt that all of us individually inspire and swallow hundreds if not thousands of them in the course of a few days' ordinary existence. The Klebs-Loeffler bacilli found in the fauces of patients as long as 100 days after recovery from an attack of diphtheria—found, too, in the throats of medical men, students, and nurses in fever hospitals—offer a subject for much discussion and deep thought, with great difficulty in the way of harmonising the imperious dictates of modern science, as based on our present hypotheses, with the experiences of practical medicine.

These few problems in pathology offer a most attractive field for study and discussion, but I must leave them now as they might easily be made to occupy all the time at my disposal, whereas I brought them forward merely to emphasise the thought that we must not consider that we know everything yet about the foundations of the noble superstructure which has enabled me to lay before you the following records.

My list comprises some 150 cases of more or less serious trouble beyond the reach of our present knowledge of drugs or of general medical treatment, though the signs of the times are at least hopeful that in the future we may advance even in these directions. My numbers are too small for making any sweeping and generalised deductions, and, moreover, we can each of us only deal satisfactorily and thoughtfully with what falls under our own notice; in clinical medicine large piles of statistics may have their uses, but they do not drive an impression home to a conviction so securely as does a little rumination on one's own personal experience. It would be entirely out of my province as a physician to discuss the surgical details of the cases I am bringing forward. Those details I must leave to surgeons to think over, my intention is rather to discuss the questions, Have we advanced, and, if so, how far, since Hunter's time in the diagnosis of disease requiring surgical aid? and By what criteria in symptomatology shall we decide when to advise operation? Generally speaking, I shall endeavour to discuss these points in each of the groups into which I have divided the cases.

CARCINOMA AND OTHER MALIGNANT GROWTHS.

Of cases of carcinoma of the alimentary canal and its correlated glands (I may here state once for all that time will not permit me to go beyond the abdominal cavity) to which surgical interference seemed to offer the best chance of relief either from the disease or from very distressing symptoms I have submitted 18 to operation—viz., two cases of carcinoma of the œsophagus, three of carcinoma of the stomach, five of carcinoma of the intestine, and eight of carcinoma of the liver, &c., with ascites. My results, which, judged by statistics, seem to be about the average, were as follows. Of the cases of œsophageal cancer one patient died within a few hours of the operation from exhaustion and what one must term shock; the other patient lived nearly six months. In both cases a gastrostomy was performed. During the last few months a case has come under my personal observation in which a silver tube was

passed through the growth and kept in position. Life was prolonged for some months afterwards, but the conditions of it as well as that of the case of my own after gastrostomy were so miserable that both the subjects more than once expressed a wish that death might more rapidly end their inevitable sufferings; and in cases of this nature and position of the growth I have been led to form a very strong opinion that a policy of what amounts to euthanasia is the only one to be pursued—the gentle passage of a soft tube or bougie is the utmost I shall ever suggest in the way of manipulative efforts. Of the cases in the stomach itself two patients died within a week and one lived some three months with a fair degree of comfort; in all three no attempt was made to actually remove the growth; relief of vomiting was what was desired and even in the rapidly fatal cases this object was attained. I am, of course, well aware that a more radical operation of removal has been performed with success more or less permanent in many cases, but my experience in the post-mortem room is such as to convince me that a real cure must be of the very rarest occurrence. However, in almost all cases the relief obtained, whether it be a rapid euthanasia or merely cessation of distressing vomiting, is so great that I have no hesitation in offering operation to the patient when other simpler measures have failed to alleviate symptoms; but it is an imperative necessity that the friends, at least, shall have it most clearly explained to them that relief from suffering is all that can he promised or even hoped for. Of cases beyond the stomach there were five, all admitted for obstruction of the bowels of a subacute nature; two patients died rapidly from the combined effects of the obstruction and of the disease; two were relieved and lived in tolerable comfort for some months; and one, a woman, 48 years of age, who had for a long time suffered from abdominal trouble and who was found to be suffering from carcinoma of the splenic flexure of the colon, is still alive and well (20 months after complete removal of the growth). Now a fatal event in carcinoma of the intestine is almost invariably brought about by obstruction with or without one of its commonest complications—viz., peritonitis from perforation. This obstruction itself renders surgical interference imperative to prevent a most distressing death; therefore, knowing that such obstruction is practically inevitable at some period and knowing, too, that the mesenteric glands are rarely involved before obstruction occurs, I say that we must urge operative interference as soon as we have reasonable evidence that carcinoma has begun to grow in the intestine; even one or two cases such as my last give us additional encouragement to advise such procedure. (N.B.—I must here draw attention to the fact that I have not spoken about growths below the sigmoid: such as occur in the rectum belong almost purely to surgery. If the choice of an artificial anus or euthanasin were offered me under such circumstances the latter would be very attractive.) Of growths in the liver, &c., causing ascites I have had some eight to 12 cases; all were, of course, rapidly fatal. The exploratory operation and its results will be mentioned later.

Such are my results; how do they compare with what Hunter might have done? On *primâ-facie* consideration they seem to give us an enormous advantage over him, and no one can deny that we know much about cancer which he did not, but closer examination shows, I think, that at present our advantage is not so overwhelming as some enthusiasts would believe.

The deepest researches into the minutest structural details of the growth by the aid of optical instruments of a delicacy and precision of which Hunter had no conception have seemed to give us a hint of a possible microbiotic activity in such neoplasms. Experimental work has hardly corroborated such views, though it has not contradicted them very seriously, and investigations into the local geographical distribution of cancer have rendered some, though feeble, support to such a view. Nebulous as the hypothesis may be at present it suggests to us the glorious possibility of our some day being in a position to lay down rules of precision as to the prophylaxis of cancer, and that will indeed be a triumphant position; as yet it is not.

Once a growth has begun and its malignant nature is suspected we have at our command means of scientific examination to determine with almost mathematical precision its exact nature and probable clinical course. It is to surgery and physics—knowledge of optical instruments—that we are indebted for this power. A general anæsthetic will allow us to examine an abdomen more completely and accurately than was possible for Hunter to do. All this is pure gain, and so, too, is the method of hypodermic medication by morphia and other drugs for the relief of pain. It is said, moreover, that the absence of hydrochloric acid from the gastric contents is strong evidence that a case which may be simple or malignant ulcer of the stomach is in reality carcinomatous, but I doubt if the information does much to save life or even suffering. I shall have a word or two more to say on the point when I come to speak of gastric ulcers.

To sum the matter up, we have gained but little in clinical diagnostic precision, much in scientific knowledge, and most of all in our powers to soothe the passage to the grave by means of hypodermic medication and operative relief to urgent distress. Cases in which we urge operation must be carefully selected; but when, on the other hand, the patient or friends urge us to do something we should not, provided we explain matters thoroughly, be too shy of operation, for even euthanasia on the table or within a few hours is a boon for which many a sufferer must be only too thankful. (The position of the operation of oöphorectomy for cancer of the breast is as yet too insecure for me to offer any opinion upon it.)

ULCER OF THE STOMACH.

Of ulcer of the stomach I have had only one case that has perforated while the patient was in hospital; the patient recovered after operation as we were able to act promptly. In private practice out of over 60 cases of fairly definite evidence of ulcer in no less than 10 of them had perforation taken place, and out of these 10 only two recovered, owing to the long interval that had elapsed between perforation and operation, in some of them owing to the absence of recognition of the serious accident that had occurred. One may say that after perforation had occurred operation is absolutely imperative if life is to be saved; and, further, that if operation is performed early enough a good result is reasonably certain. In speaking of cancerous growths we always have a dread, based on an only too common experience, that whatever we may do in the way of removal the disease will sooner or later, generally very much sooner, reappear in an aggravated and hopelessly inoperable form. It is this dread which stays our hands and makes us so diffident in recommending operation. Here in our present section, and I may say in the other sections of surgical emergencies with which I propose to deal, there is happily no need to fear such a mysterious and baneful influence, and we are free to deal with present difficulties without any particular anticipation of their recurrence. If life can only be saved from the danger which at the moment threatens its extinction there is no special reason why health should not be completely restored. What, then, may we ask, is our position compared to Hunter's in dealing with gastric ulcer? Hunter was as well aware as we are that ulcer occurs. He knew that profuse hæmatemesis or melæna in a young girl indicated the opening of a vessel in the stomach or the duodenum; he knew, too, that perforation of an ulcer occasionally took place, and I am sure that no one regretted more than he did his absolute impotence to give aid in face of this then inevitably fatal calamity. Now in regard to a positive diagnosis I doubt whether we are much better off than Hunter was. We can talk very glibly of hypo- or hyper-chlorhydria, of succorbæa gastrica, or its reverse, of atonic dyspepsia, &c.; we can test for hydrochloric acid in the juice and think if it be absent that we have probably carcinoma to deal with; we can, if—a big *if*—the patient will let us, give test breakfasts and pump up the resultant digesting mass; we can still say with Hunter, "Here is an ulcer," because of a profuse hæmatemesis; and when pain is very severe and localised and relieved at once by vomiting we can believe that an ulcer is present and treat the patient as though it certainly were so. But with all this and with all our fancied skill and all our instruments for examining the stomach I assert unhesitatingly that it is still impossible, and I fear will always remain so, to exclude the presence of an ulcer, to prove a negative diagnosis. It must be the experience of all of us, whether by the bedside or in the deadhouse, that a profuse hæmatemesis or a fatal perforation has been absolutely the first indication that anything has been wrong with the stomach, except perhaps the very mildest and negligible degree of indigestion or discomfort after meals. Can we, any of us, assert that Carlyle certainly had a chronic ulcer and not a simple painful dyspepsia? There is no symptom and no group of symptoms of an

ordinary character—i.e., excluding hæmatemesis and perforation—that may not exist with or without ulceration. If, however, we have not learnt by what test we shall exclude an ulcer we have learnt with some accuracy the natural history of an ulcer when left alone or when it persistently refuses to heal, and this problem will bear a little discussion from my present point of view of surgical interference. It combines the consideration of prognosis and modern treatment. We know by experience that hæmatemesis is happily but rarely fatal in its first onset; out of over 50 cases of this very alarming symptom when due fairly certainly to ulcer I have only known three in which death was directly due to the first bleeding, and one of these was probably tuberculous. It occurred in a man, about 40 years of age, who was suffering from advanced phthisis and on necropsy the blood which filled the intestines from the stomach to the anus was found to come from a small hole in the cardiac end of the stomach quite unlike a simple ulcer; there was an obvious lateral opening into an artery into which a small probe could be passed. In face of this fact, then, it is obviously quite unjustifiable to suggest operative interference upon the primary occurrence of hæmatemesis however profuse it may be. But when an ulcer, or a suspected one, shows a tendency to continue to bleed with repeated attacks of hæmatemesis or persistent melæna, so that life is threatened by severe loss of blood, then I think we ought to ask a surgeon to interfere. For this particular accident I must admit that I have not yet[1] had occasion to call in surgical aid, but several such cases are reported and more, no doubt, have been met with. Hæmorrhage of a profuse character is more commonly associated with the small, rapidly occurring or acute ulcer; perforation, on the other hand, I believe, is more a characteristic of that ulcer which, whatever its early history may have been, shows on ocular examination distinct evidence of having been present for some time. It is as large as a shilling at least, and often much larger, and its edges are usually very thick and prominent, and they, as well as the adjoining portions of the stomach, are more or less indurated, and possibly puckered, by fibrotic change as though an attempt at healing were being made. Such an ulcer we have learnt has a fatal facility for perforating (for bleeding, too, on occasion) and that without any warning. It has, also, two other features which cannot be ignored. The first is a clinical one—viz., that by the severity of the pain or discomfort the patient may be brought by starvation to the verge of death or at least may be made such a social cripple—incapacitated from domestic work or taking any pleasure in life—that any measures which offer a reasonably safe chance of recovery should, I think, be placed before him; and the other is a pathological problem—viz., that carcinoma may develop in or near the seat of the ulceration. I have seen at least two cases on the post-mortem table in which a chronic ulcer was in such association with a carcinomatous lump as to leave no doubt on my mind at the time that there was a specific illustration of effect and cause. Now in face of the chances of (1) hæmorrhage, (2) perforation, (3) social crippling, and (4) carcinoma it is to my mind a very serious question whether we should not urge surgical exploration in cases where we have reasonably strong grounds for suspecting an ulcer of the stomach which has lasted for, say, over three months. We cannot tell when the fatal accident may occur, but forewarned is forearmed, and anæsthesia and antiseptics have given us a power of dealing actively with the stomach such as Hunter could scarcely have dreamed of. He had nothing—we have everything, and I think it our duty to use what we have.

Since I began to write this oration two such cases of persistent ulcer have come under my care; both have been subjected to laparotomy with success complete up to date, but the period which has elapsed is too short to say if it will be permanent. At any rate, the freedom from pain and the restoration to an active and even enjoyable life have been such pleasant results, even if only temporary, that I shall be led to advise a much more frequent and perhaps even much earlier resort to exploratory laparotomy than hitherto in similar cases.

To render my position clear I might summarise my views on operative interference in cases of gastric ulcer thus: on the first occurrence of hæmatemesis or on first making a diagnosis medicinal measures alone should be tried; on a rapid reappearance of hæmorrhage I would invite consideration of operation; on a third repetition or confirmed persistence of hæmorrhage I would urge it. When the diagnosis rests on a less secure foundation—i.e., pain, &c.—I would insist upon rest in bed with slop diet for a fortnight; the disappearance of the symptoms on enforced rest in bed even without greater strictness in diet is to me a somewhat mysterious, but none the less indubitable, fact. If with resumption of active life the symptoms recurred I would again on the second recurrence begin by suggesting operation and on the third recurrence most strongly urge it. These opinions are, of course, quite apart from the urgent and absolute necessity of operation for perforation.

[1] During the last week and since this oration was completed a case has occurred in my practice. Since operation no more bleeding has occurred and the patient is doing remarkably well and has left the hospital cured.

GALL-STONES AND OTHER HEPATIC CONDITIONS.

Of gall-stones I have had 12 cases in which I deemed it best for my patient to ask the surgeon to give relief. Two of these patients died, both, I am sorry to say, from peritonitis following the operation; but as in both of them suppuration had already occurred previously to surgical interference my figures hardly represent a fair average of mortality inasmuch as the time for operation, could we only choose it, is before suppuration, not after it. It is in the relief from gall-stones that conservative surgery has won some of its most brilliant successes.

That Hunter was fully aware of the existence of gall-stones and of the tricks which they may play upon their victims by causing colic, inflammation, suppuration, and intestinal obstruction is of course certain, but until these had reached a dangerous, if not even a fatal, condition it was absolutely out of the question for him to consider surgical relief, however much he may have regretted his inability to afford assistance.

As regards the natural history of gall-stones we have undoubtedly accumulated from the post-mortem room and the bedside a great deal of knowledge which was beyond Hunter's range of vision, and this we have turned to good account in prophylaxis and in medical treatment in the early stages of mischief from the concretion. My experience has convinced me that in salicylate of sodium, a drug undiscovered in Hunter's time, we have a substance which acts most favourably on the biliary passages and on the secretion, tending to restore health to the one and to expedite the removal of the other. But it is, of course, in our power to examine the patient under general anæsthesia and then in our power fearlessly to open the abdomen and to act upon the condition found that the enormous difference between ourselves and Hunter consists. With us it is now simply and solely a question of choosing the time and the case upon which to operate.

The following case illustrates as well as any our position. In November, 1895, I was asked by Mr. H. E. Simpson to see a woman, aged 28 years, who had been ill for over five weeks with a vague illness that had been called at one time influenza and at another typhoid fever by the several medical men under whom she had been. I confess when I saw her that I could frame no possible diagnosis, as she was so exceedingly tender in the abdomen that examination to serve any useful purpose was quite out of the question. I had her removed at once to the hospital and under an anæsthetic we immediately felt a large hard tumour in the neighbourhood of the gall-bladder. There was no room for hesitation that this was the cause of her agony and equally none in advising immediate operation, when a large gall-stone was found lying in a collection of pus. She made an uninterrupted recovery after its removal. In 1898 I had a precisely similar case in a man aged 50 years, with an equally happy result.

The point that we have to try to determine is this, Under what circumstances is operative relief necessary or advisable? I hold it to be so for three conditions which, though primarily different, are apt to merge one into the other or even to be combined with one another: (1) if there be a large stone, too large to escape per vias naturales; (2) if there be a large accumulation of smaller stones causing obstinate, frequent, or long-continued trouble; and (3) if suppuration has occurred round a stone of any size. Our problem is to determine that one of these is present and if possible to ascertain which of them.

Now, if a small calculus forms, or even two or three, and by attempts to escape causes colic followed by jaundice the attack may be expected to subside in, say, five or six days; if it does not do so we begin to be suspicious. During the time which elapses between the onset of pain and the

conclusion of the illness the motions should all of them be carefully sieved, both to clinch the primary diagnosis by the discovery of a stone or *per contra* that the absence of a stone may be carefully noted for future reference. Now, no one would dream of recommending laparotomy in the early days of a first attack of biliary colic, and especially if a stone is found in the fæces. If no stone be found then if the attack of pain persists for, say, longer than from two to three days, or if it dies away to recur even after a long interval, we have additional reason for supposing that the cause of the trouble has not disappeared and with each day's persistency of symptoms or with each recurrence of them we get stronger and stronger evidence that one of our three operative conditions is present—in fact, one may say that these recurrent attacks of local pain, associated or not with jaundice according to the precise position of the stone, but nearly certainly associated with a gall-bladder large enough at least to be felt,—these attacks, I say, are the strongest diagnostic features of a stone too large to pass per vias naturales, for they are due to its ball-valve-like action in the duct. This, too, is the commonest feature if large numbers of smaller stones are present, for the actual symptoms are generally caused by one more pushing than the rest. The third condition, that of suppuration in the gall-bladder or round an encysted stone, is not so easy of diagnosis. The physical sign of an abscess—i.e., a definitely fluctuating tumour—is conspicuous by its absence, and even when such tumour is present it is almost invariably the gall-bladder itself, which it is true may be full of pus and certainly, if definitely felt, even though the contents be bile or mucus, is an almost absolute indication for operation. The *symptoms* of suppuration in this region are misleading, or perhaps I should say are extremely difficult to discriminate from those of any simple non-purulent affection of the biliary passages. The following brief outline of a case seen with Dr. T. C. Winn illustrates admirably these difficulties.

The patient was a man, aged 25 years, who, after a heavy indigestible meal of cockles and pork, &c., was suddenly seized with intense abdominal pain which at first was naturally attributed to acute indigestion. When some three or four days later rather severe jaundice appeared it was naturally thought that in so young a subject and with such a history this was due to catarrh of the bile-ducts. But the pain would not disappear nor would the jaundice lessen, and when a hectic temperature ranging to 103° F., associated with most profuse nocturnal sweating, followed—a sign very strongly suggestive of pus in a doubtful case—the assumption was very naturally arrived at that suppuration had occurred in or near the gall-bladder—a diagnosis in which I must admit I fully concurred when I saw the patient on the twelfth or thirteenth day of his illness. There were the cachexia with sunken eyes and the rapid small pulse such as are usual with pus. Accordingly I had the patient removed to the hospital, and on the next day, as the symptoms were not mitigated in any way, the abdomen was opened. We found nothing—not even a stone or a drop of pus. Subsequently to the operation most definite signs of pericarditis and of left-sided pleurisy developed, and so certain was I that these indicated pus that had escaped observation that I should have advised further exploration to evacuate it had not the patient seemed too ill to stand such measures. However, whether pus was there or not, he eventually struggled through without any being seen and left the hospital practically well, and I can only conclude that the whole illness was one of severe catarrhal jaundice. Whether a blood-count would have saved us from the mistake I cannot positively assert, as I was not then sufficiently alive to the value of a leucocytosis as an indication of a concealed suppurative focus. In the future the absence of a leucocytosis will make me more chary of suggesting operation, though I can only say now and repeat it that if with the symptoms presented by this man pus be not forming I know not by what other symptom than a leucocytosis I can recognise it. I do not know that even now the operation is to be very much regretted, for if pus be present the chances of the patient's recovery are small almost to vanishing-point, while recovery from a merely exploratory laparotomy is almost a certainty. It is in this statement that the situation can now be summed up.

Of hydatids and large hepatic abscesses I do not propose to say anything. I have had three cases of the former under my care and five of the latter, but the treatment is so obviously and imperatively surgical that no question can arise for a physician except that of diagnosis.

EXPLORATORY OPERATIONS AND ASCITES.

I now pass on to a group of abdominal cases in which for some reason or other the diagnosis is obscure. One of the commonest reasons for this obscurity is ascites, which even under an anæsthetic prevents a thoroughly satisfactory examination of the abdominal organs. To the treatment of this ascites I shall presently devote some considerable attention. As regard swellings (other than ordinary ascites) and tumours and abnormal abdominal conditions of doubtful origin, connexions, and pathology, there is a universal consensus of opinion that they must be investigated by a laparotomy if they are giving rise to symptoms which so seriously cripple the patients as to lead them to ask for relief even at the cost of a serious operation or if in our opinion they are tending to a fatal issue unless radical relief can be obtained. Of such obscure cases, excluding ascites, I have had 23 operated upon. Inasmuch as after operation the diagnosis has been cleared up the cases have been reckoned in their appropriate categories. I have no figures of mortality to give, but I can most definitely say that I have rarely, if ever, had any occasion to regret the performance of the operation either for my own reputation or for the sake of my patients. No patient has died directly because he was opened; some have undoubtedly died from the difficulties of removing a removeable condition, and that death has been hastened by a few days in cases which, had we but known it, were inevitably foredoomed to an early grave I am prepared frankly to admit, but such death was invariably robbed of its most distressing features, and euthanasia is not always to be despised as a gift to suffering humanity. It was one which Hunter dare not and could not give to his patients.

For some years I have held a strong opinion, and I gave it public vent as long ago as 1896, that the proper method of dealing with ascites was to have the abdomen opened by a surgeon when purges, diaphoretics, and diuretics had had a fair chance or when there was no time to use them owing to the urgency of the case. I am glad to see that there has been lately a steadily increasing current of opinion in the same direction. I have had the operation performed at my suggestion in hospital and private practice some 50 times or more—in some cases of heart disease and cirrhosis of the liver the records have escaped observation. I advocated, and still advocate, it on the following grounds: (1) it is more scientific than paracentesis; (2) it is safer for the patient; (3) it assists diagnosis where that is doubtful; (4) it permits of the removal of removeable causes; and (5) it sometimes cures cases which are otherwise incurable. On each of these points I wish to say a few words.

1. *It is more scientific.*—This statement requires no argument; it simply means that for a blind but very sharp piece of steel passing through goodness only knows what we substitute the exactitude of sight and touch of a skilled surgical hand which can tell precisely how far it has gone and what it is going through and has power to deal properly with any abnormality of vascular distribution or with any pathological condition as it proceeds onwards to what may be termed the dangerous area of the peritoneum. Before operation we are in absolute ignorance of even the presence of adhesions, let alone their position.

2. *It is safer for the patient.*—This would seem to follow at once as a natural scientific corollary to the first proposition, but I must admit that there are two sides to the question. On the one hand, I can certainly say that I have never seen death arise from a simple exploratory laparotomy where no attempt has been made to perform further surgical manipulation, while I have seen several cases on the post-mortem table in which acute peritonitis has followed the use of the trocar—to say "caused by" is perhaps too strong a term because stringent precautions had been taken to prevent the entrance from without of microbes, and I could find no wound of the visceral peritoneum covering the gut, but still we must remember that the intestines are inhabited by a very mixed population of microscopic creatures, some undoubtedly always peaceable and useful citizens, but others of a distinctly turbulent character, always ready for mischief, and some positively living only to do harm if they can get a chance, nor do they require for this chance an injury appreciable to the naked eye, scarcely even to the microscope.

Again, I am bound to admit that either the shock of the operation (whatever that may mean) or the influence on the constitution of a general anæsthetic has seemed to affect for evil the pathological conditions under which the patient

was labouring, so that more than once I have been obliged to wonder whether the operation has not accelerated the downward progress of a disease—e.g., advanced cirrhosis of the liver or severe morbus cordis—which though no doubt fatal in itself at an early date might have permitted some prolongation of life, accelerated it, I say, more than the unrelieved ascites would have done. Here is another great field for local anæsthesia, for I have formed a strong opinion that the influence of the general anæsthetic is responsible in a greater degree than the shock for the untoward effects. I have not yet had the courage of my opinions and had a laparotomy performed under the influence of hypodermic injection of cocaine or of water by Schleich's method, but I feel confident that it is the right thing to do, especially for such cases as those taken as illustrations above, where actual exploration of the peritoneal cavity is unnecessary or where exploration having once been done the re-accumulation of the fluid renders a repeated emptying of it necessary. It may be objected to such a procedure that in opposition to the simplicity of the trocar and cannula, with its one bold plunge, it is too complicated without specially skilled surgical assistance and that there is great danger of sepsis from leaking. To the first point I would reply that I am no strong believer in the supposed want of skill in our general practitioners—they are too well taught nowadays; and to the second I can say that I have myself known a case in which the hole made in an œdematous abdominal wall by a trocar refused to close for over a week, fluid steadily leaking all the time, without any peritonitis, and that in a poor woman in a London slum without any skilled nursing or for the matter of that any skilled attention at all. On the whole, then, I think that we are justified in saying that operation on its own merits is safer for the patient than the trocar.

3. *It assists and clears up a doubtful diagnosis*.—This proposition only requires to be stated to be at once admitted by all as self-evident. It would be at once superfluous and tedious to enumerate illustrations of cases of abdominal surgery where previously to the operation either no positive diagnosis at all had been arrived at or one totally and absolutely erroneous. Only within the last year four cases worthy of mention have occurred to me in which ordinary—so far, that is, as sight and touch would make them so—cirrhosis of the liver was causing ascites and yet in which the exceedingly abstemious—in one case absolutely teetotal—habits of the patients had prevented me from even taking the condition into consideration in guessing at a diagnosis. But who amongst us would be rash enough to claim diagnostic infallibility as to the cause of a given ascites?

4. *It permits at one sitting of the removal of a removeable cause*.—This statement has, of course, a much wider range than the consideration of mere ascites, but it must be placed here because, as I have already pointed out, the accumulation of fluid in the peritoneal cavity so frequently masks its own underlying cause, which can only be ascertained and possibly dea't with after removal of the fluid. Such complete investigation is obviously impossible through a cannula, however large. A bare list of the conditions here referred to capable of complete removal by the surgeon with years of enjoyable health, but not capable even of palliation by medical measures, forms a *monumentum ære perennius* to the development of nineteenth-century surgery. It includes not only those conditions which I am in this oration briefly considering, but also nearly every pathological condition of the abdominal organs. The statement itself needs no demonstration; it is a self-evident proposition and carries with it a strong argument in favour of my contention as to the correct method of dealing with ascites when that is the preliminary and very incomplete—though correct as far as it goes—diagnosis.

5. *Cases usually considered incurable have recovered after laparotomy*.—Mr. Treves, the late Mr. Greig Smith, the late Mr. Lawson Tait, and, in fact, I may say all surgeons who have had much experience of abdominal work have reported cases in which after an exploratory laparotomy the patients have completely recovered notwithstanding that an apparently incurable, and certainly irremoveable, malignant neoplasm or other condition was found, while tuberculous peritonitis shows such a remarkable percentage of cures by laparotomy that this has become the one universally recognised method of treatment in all cases in which effusion—as opposed to mere adhesive inflammation reaction—is a prominent feature. These results are beyond all dispute and are now accepted as demonstrated facts, but so far as I am aware no such results are recorded as occurring after the mere withdrawal of the fluid by means of a trocar and cannula.

A good deal of speculation has been hazarded as to the meaning of the phenomena in question. To me the most reasonable explanation seems to be those views which attribute the good results to the free entrance of oxygen into the peritoneal cavity, and I feel inclined to suggest that more active steps might be taken in this direction by the intentional introduction of pure oxygen or even of ozone, the more active form, at the operation or subsequently through a tube. I cannot see what possible harm this could do and we know that such oxygenating applications have been of very material benefit in ulcerative conditions of the extremities.

These five points constitute, I think, an unanswerable case in favour of laparotomy against cannular drainage at least once in the course of every case. Should repeated emptyings of the peritoneum become necessary the practical difficulties in the way of multiple laparotomies may render paracentesis justifiable, and I must admit that, at any rate in remote country districts, it may be almost impossible to operate by the knife. I can only hope, and do sincerely believe, that future experience will demonstrate simpler means of operation and that the difficulties in the way will steadily diminish until they disappear altogether and relief by the knife becomes the rule.

APPENDICITIS.

Hunter can have known little or nothing about this trouble. He knew that cases of acute pain in the abdomen with special tendency to be localised to the right iliac fossa occurred and without the peculiar features of either renal or biliary colic, and that some of such cases were followed by recovery and relapse while others speedily ended in general peritonitis and death, but he was equally powerless to render efficient aid either to the relapsing or to the fulminating cases.

To consider adequately the views held as to the pathology and treatment of the affection, all of which are the result of modern observation and surgical development, would alone occupy the whole of the time at my disposal. I can here only deal briefly with my own cases and experience and the lessons which they have taught me. I have 38 cases of which the results, temporary or permanent, are known to me. They fall into the following groups: one case of perforation which was watched in hospital and in which operation was declined; four cases operated upon but in which the patient rapidly sank; eight cases operated upon in which pus was found and the patient did well; 19 mild or relapsing cases with successful operation; and six mild or relapsing cases in which operation was refused.

The case which was taken into hospital for observation and in which the patient died without being operated upon made the greatest impression upon me and I may briefly detail its particulars as it seems to contain an epitome of our difficulties.

The patient was a young man, aged 26 years, who in the midst of apparent health was seized one Saturday morning with a pain in the abdomen which gradually got worse. He was at the same time sick, but not very violently so; the bowels had acted quite naturally that morning. The pain, never very severe, continued during Sunday and Monday and became more localised to the right iliac fossa. There was no more vomiting, but the bowels did not act again. I saw him on the Tuesday morning and found him looking fairly well. The tongue, which was rather dirty, was not dry. There was no nausea and the bowels had not acted since the onset of the pain. The pulse was only 100 and seemed fairly good. There was some fulness to be felt in the right iliac fossa and tenderness over it, though he could well bear gentle manipulation. I admitted him at once for observation and immediate operation if necessary. On the Wednesday the bowels acted freely of their own accord and he seemed so much better that operation was deferred. In the evening he got worse quite suddenly and was in such a collapsed condition that permission to operate was then refused, and he died on Thursday morning early. How can we avoid such distressing results?

The history of many cases which have been operated upon within a few hours of the commencement of the pain and yet in which pus has been found leaves no room for doubt but that very frequently inflammatory trouble of some sort can arise inside the appendix and be absolutely latent so far as any symptoms or complaints by the patients are concerned for some time. The first warning signal, I believe, is always pain, and what this pain indicates it is our most

special business to find out. I believe it invariably indicates that the inflammation has at least reached the peritoneum, and this it seems able to do in one of two clinical forms, either (1) as an adhesive peritonitis or (2) as a distinct perforation which must inevitably lead to a suppurative peritonitis, local or general according to circumstances. Now, if at the onset this pain is so severe as to cause very marked collapse and persistent vomiting with a small thready pulse and cold, clammy sweat there can be no room for hesitation—immediate operation is the only chance which the patient has of recovery. Such severe pain and attendant phenomena of collapse are, however, the exception, and more commonly the history is that the patient has been seized with the pain and been sick but that in a short time things have assumed a less threatening aspect, and when we arrive on the scene we find the patient fairly comfortable, complaining only of a little pain but probably of great local tenderness, and it is here that our difficulties commence, and from this point that our judgment may lead us grievously astray. We have *primâ facie* strong ground of reason to wait for a few hours to see what an ice-bag applied locally and salicylate of soda in 20-grain doses will do, but during these few hours the patient must be most carefully and continuously watched with the very keenest eye for details; especially must we look for a complaint of a feeling of sinking or collapse on the part of the patient, a quickening of the pulse, a rise or marked fall of the temperature, a drying or fouling of the tongue, an increase of the pain, the slightest sign of distension of the abdomen or hardening of the muscles on the other side—any untoward development of this character is a warning that the case must not be left any longer without surgical aid. In any case a second visit must be made by the medical man himself within 12 hours at the outside for further personal observation and to receive the report of the nurse left in charge. At this second visit a decision should, if possible—and generally I think it can—be made as to the actual presence of one or the other of the two clinical forms of trouble — viz., adhesive as against suppurative inflammation. We may not yet get positive information as to whether the former is or is not going to be superseded by the latter. If it be the former we are not likely to have any of the above-mentioned tell-tale indications; if the latter some of them are, I think, sure to be present; they are to my mind more important than the local physical signs in the abdomen. The presence in the right iliac fossa of something unusual which can be felt is pretty nearly constant, and I do not think that the softness of it (unless, indeed, it is definitely fluctuating) or the hardness can be accepted as a guide to operation on the one hand, or on the other as an indication that we may safely continue medicinal measures alone. We shall, however, perhaps most frequently, decide that we may still wait and the case will then pass on into a more chronic condition. Our faculties must still continue to be exercised to their fullest capacity, but we now have time to watch for the development of the more common indications of pus formation—the flushing of the cheeks or the yellowish toxæmic tinge of the skin, the sweating at night, the hectic type of temperature, and even to look for leucocytosis of the blood which may rapidly develop. Any of these features, especially if combined with any of the former acute symptom group, again makes operation imperative, for we know that pus has formed and we have not the remotest chance of knowing in which direction it will penetrate. That it can be absorbed when once it has formed in this disease I have not a particle of *a priori* reasoning—very much the reverse—or of post-mortem experience to tell me. If happily matters *progressively* improve; if the temperature becomes lower, but not subnormal, at each observation; if the pulse is of natural frequency, the face regaining a healthy appearance, the tenderness steadily diminishing, and the patient in every way doing well, operation may be delayed till the attack is over, but I should then as strongly urge operation as I would advise a man not to sleep on a barrel of gunpowder when sparks were flying around. To sum up my conclusions, we must operate in cases of appendicitis (1) instantly in fulminating cases; (2) as soon as we can be reasonably certain of pus in the less acute cases; and (3) after the subsidence of an attack in the milder cases.

RENAL TROUBLES.

Stone and tubercle are the only two conditions which I have to mention as coming under the heading of this oration. I have not had a case of cancer of the kidney in which operation was indicated. I have had ten cases in which pus, blood, or gravel or combinations of these in the urine have induced me to ask for assistance from a surgical colleague; eight of them proved to be cases of calculus and two of tubercle. Of the tuberculous cases one patient was operated on in 1896 and is still alive with only one kidney; the other sank rapidly from the development of tubercle in other organs, verified by post-mortem examination. In all the eight cases of stone the patients recovered with, of course, permanent (up-to-date) relief from their symptoms.

Now, what is our present position with regard to these renal affections? Of tubercle we know that it occurs as part of a generalised tubercle which has no interest for us at the present moment. Post-mortem experience teaches us that it may occur as a gross lesion in one kidney only and apparently remain confined to that organ for a long time, but it also teaches us that perhaps more frequently both organs are affected. Hence I would say, if we are sure from bacteriological examination—for our present purposes there is no other possible means of diagnosis—of the urine that one kidney is affected with tubercle, we should be very cautious about advising operative interference. By every means in our power, manual and cystoscopic, we must endeavour to ascertain which kidney is affected, and not only that, but that the other one is sound. Even if we believe that one is healthy I would still advise a month's course of creasote treatment, for this is the only drug which in my experience exerts any special influence on tuberculous internal lesions, and only then, and when still convinced that the other organ is sound, would I advise operation.

With regard to stone in the kidney the position is somewhat different, for though it may in a sense be a constitutional disease it is one which results in a purely local trouble, and if we can remove this trouble there is an excellent prospect of prolonged and healthy life. On the other hand, we know that the prolonged presence of a stone will eventually cause such a disturbance of the organ itself as will threaten life. The natural inference is, then, if we get symptoms pointing unmistakeably to stone, that it is our imperative duty to remove it as speedily as possible before consecutive changes in the kidney occur. We must first make a differential diagnosis between stone and tubercle—not an easy task, but one which I have discussed at some length elsewhere.[2] Here I can only mention (1) bacteriological examination of urine, a positive result from which is of course conclusive; (2) the administration of a few small (10-minim) doses of turpentine, which by exciting activity in the kidney and pelvis will cause pain if a stone is present and so give us useful information; and (3) an x-ray photograph or screen investigation. The latter, like the bacteriological examination, is, I think, only useful when a positive result is obtained. At any rate, last year I had a patient subjected to that means of investigation with a negative result, but the severity of his pain and its localisation to one kidney led me to advise, and him to consent to, an exploratory operation, when an oxalate calculus was found embedded in the substance of the right kidney and was removed with perfect relief.

I must admit that some patients in whom we believe a renal calculus to be present seem to do well, even for years, with simple dietetic and water treatment, but I have no proof at all satisfactory that distilled or any other water will dissolve a calculus once formed, whether situated in the substance or pelvis of the kidney. Hence I believe that we are acting for the best interests of our patient in calling in surgical aid at once without waiting for an insidious uræmia to end his life or for further attacks of colic to render that life unspeakably dreary. A mere exploratory operation entails but a minimum of risk and will in the future entail none, or at any rate risk so slight that even in a first attack of renal colic unless a stone be actually passed I would say the less delay in operating the better for all concerned.

Time warns me, Sir, that I must bring my oration to a close lest I weary you with commonplace remarks upon a subject that is now dominating all professional minds and has been many times dealt with by abler pens than mine. None the less it is a subject of surpassing interest to us physicians, and it is from this point of view alone that I have attempted to deal with it. Upon our surgical colleagues must I throw the burden of so improving their manipulative skill that they shall be able to render with the minimum of risk the

[2] Differential Diagnosis, Macmillan and Co.

maximum of relief to those patients in whose cases we have to confess that drugs are useless. We can only point out to them a gross lesion; it is for them to devise the best measures to remove it. I must conclude by wishing that we could realise the joy and delight with which our respected godfather would hail the results already accomplished and how eagerly he would lead the van for improvements to come.

The Hunterian Lecture

ON

THE CAUSES AND TREATMENT OF MOVEABLE KIDNEY.

Delivered before the Hunterian Society on Feb. 28th, 1900,

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MR. PRESIDENT AND GENTLEMEN,—When you did me the honour of inviting me to deliver one of the Hunterian lectures before this society this year I determined, after some little consideration, to bring before you the subject of moveable kidney, partly because it is one in which I have taken great interest for some years and in connexion with which I have done a certain amount of work, and partly because there still exists the strangest diversity of opinion as regards its frequency, its importance, the causes which give rise to it, the symptoms which follow it, and, as a natural consequence, the mode of treatment which is the most advisable for it. Some practitioners regard moveable kidney merely as a clinical curiosity of little or no importance—the source, perhaps, of discomfort now and then, but never of anything more serious. Others find in it a very grave disability which can entirely prevent the enjoyment of life and even place life itself in serious danger. According to the statistics derived from post-mortem records it is one of the rarest of affections. Those, on the other hand, who have studied the subject from a purely clinical point of view, find it by no means uncommon; and some have even gone so far as to say that it is present in greater or less degree in as many as 20 per cent. of adult women. Apparently, also, while in certain patients the most serious symptoms are caused by comparatively slight degrees of mobility, in others the kidney may move through the widest range without their being even so much as aware of it. Some of these discrepancies are easily explained. The rarity with which a moveable kidney is found post-mortem, for example, is accounted for by the fact that when the body is laid in the horizontal position the kidney nearly always slips back into its normal place by reason of its own weight or from the pressure of the intestinal gases, and that when once it has slipped back into its bed it becomes fixed there by post-mortem rigidity and by the density of the surrounding fat, which grows firmer and harder as the body cools. There is no difficulty in understanding this, but with regard to some of the other points which I have mentioned, such, for instance, as the cause of the undue mobility, it is by no means so easy. The opinions which are generally current are as divergent as they well can be, and it is to these points, therefore, that I intend to devote what I have to say to-night.

I may clear the ground at once by saying that I only intend to deal with what are known as moveable kidneys, or—to give the title which is certainly the most scientific and is perhaps the best—with cases of nephroptosis. Floating kidneys—that is to say, kidneys which possess a true meso-nephron—I have never seen, and, without going so far as to say that such a thing is impossible, it must be admitted that if the mode of development of the peritoneum and of the kidneys is taken into consideration, the existence of such is exceedingly difficult to understand. It is possible, of course, for the peritoneum on the ventral surface of the kidney to become so far relaxed as to allow the kidney to push it in front of it, in the same way that a loop of intestine can push out a pouch of peritoneum through some weak spot in the abdominal wall and form the sac of a hernia, and it is conceivable that the kidney when it becomes displaced may insinuate itself between the layers of the ascending or transverse meso-colon and so acquire for itself what appears to be a special covering of peritoneum; but neither of these presents the slightest resemblance to a true meso-nephron and could hardly be mistaken for it. Nor am I going to deal with misplaced kidneys, which, because they lie rather lower than normal and are therefore rather more prominent in the abdomen than they should be, are often credited with a wider range of mobility than they really possess. Cunningham has shown that the left kidney lies entirely above the sub-costal plane—the horizontal plane drawn across the thorax on a level with the lowest part of the tenth rib—and that the lower end of the right kidney is only a quarter of an inch below. In this position, if the thorax is well developed and the patient is lying upon the back, the kidneys cannot be felt. Sometimes, however, especially in young subjects with a yielding abdominal wall, if the thorax is long and sloping the sub-costal plane lies so low that when the patient stands upright and takes a deep breath the lower end of the right kidney can be distinctly grasped and felt to slip away from between the fingers in its characteristic manner. The kidney can be felt, and felt to move, but it is not for that reason a moveable kidney in the clinical sense of the term. It follows all the movements of respiration, not those of inspiration only, and retains its connexion with the under surface of the diaphragm.

The kidneys are usually regarded as if they were fixed organs, but this is incorrect. They are moveable, and during life, with all their anatomical relations undisturbed, they possess a range of up-and-down movement which has been estimated by Albarran at from three to five centimetres. This fact must be apparent to everyone who has exposed a kidney by incision through the loin—a method which is not, like the abdominal method, open to the charge that it causes loosening and displacement of the kidneys by interfering with the intra-abdominal pressure. This makes it even more difficult to define what should be called a moveable kidney. Kendal Franks considers that the extent of kidney surface which can be felt beneath the ribs is the best criterion as to whether the kidney is pathologically or physiologically moveable. A much more satisfactory test is the failure of the kidney to re-ascend on tranquil expiration—coughing or straining is not fair—when the patient is standing upright and has forced the kidney as low down as he can by deep inspiration. I look upon this as sufficient, even if the kidney comes down only low enough to enable its inferior extremity to be felt. If, on the other hand, when the patient is standing upright the kidney descends on inspiration so as to bring even half of it within reach, I should not on that account regard it as pathological, provided it recedes as soon as the tension of the diaphragm is relaxed. The kidney still retains its normal relation to the diaphragm, the movement of the one follows that of the other, and this I regard as the real test whether the mobility is normal or not. But the patient must be standing upright. It will not answer if he is lying down, for in this position even a greatly displaced kidney may slip back again into its bed of its own weight.

The structures which surround the kidney lend them support but do not in any way bind them down. The kidneys lie in recesses on either side of the spinal column. In the lower animals which habitually retain the horizontal position these recesses are deep and compressed from side to side, so that a large extent of the surface of the kidney is in contact with the walls. In man, owing to the direction taken by the ribs and the very small depth of the thorax compared with its breadth, these recesses are much more shallow and more open, and in women they are more open than they are in men.

The kidneys are invested with what has been described by Zuckerkandl and Gerota as the peri-renal fascia. This is a development of the sub-peritoneal tissue, strengthened upon the left side, where it lies upon the ventral surface of the kidney, by some fibrous strands, which have been shown by Zuckerkandl to be the remnant of the fusion of the descending meso-colon with the primitive parietal peritoneum, about the fourth month of fœtal life. The corresponding strands on the right side, owing to the different position of the colon, stand in no relation to the kidney. The fascia consists of two layers, anterior and posterior. These are united together along the external convex border of the kidney, where they fuse with the ordinary sub-peritoneal

tissue, but on the mesial border and below they remain quite separate. The anterior layer, lying upon the ventral surface of the kidney, passes across the great vessels of the abdomen and becomes continuous with the anterior layer of the opposite side. Below both layers are lost in the cellular tissue of the iliac fossa. Together they form an investment for the kidney, loosely attached to it by connective tissue and fat, open on the inner side and below. Such an arrangement checks all movement of the kidney forwards or outwards, but, like the shape of the recess in which the kidney lies, it offers no resistance to a descent downwards and inwards. The normal movements of the kidneys during respiration and when the body is raised from a horizontal to an erect position take place inside this investment.

Immediately around the kidneys, inside this peri-renal fascia, is a large amount of fat which differs in colour and consistence from the ordinary sub-peritoneal fat and must be regarded to some extent as a special structure having a special function. It is but slightly developed until about the eighth or tenth year, and it is so soft and delicate in structure that it appears much more suited to facilitate the movements of the kidneys than to check them. During life it must be as soft and yielding as a water-bed. This deposit of fat is especially thick behind the kidney and opposite the hilum, for on this surface the peri-renal fascia is closely attached to the transversalis fascia and this in its turn is firmly fixed to the muscles beneath. In front, on the other hand, there is comparatively little, for here the anterior layer of fascia is more loosely attached to the peritoneum and both are moveable. Below it is more abundant than above, because movement in the upper direction is checked by the diaphragm. Atrophy of this fatty capsule has been noted in a certain number of cases of moveable kidney, especially in tuberculous patients, and it has been supposed from this that the disappearance of the fat was the cause of the undue mobility. It is more common, however, to find it well and even abundantly developed, so that this can hardly be the case. When the kidney is displaced a large proportion of the fatty capsule accompanies it and not unfrequently causes considerable delay during the operation of nephrorrhaphy, owing to the fact that it must be stripped off in order to ensure satisfactory fixation. Inside this fat, and running through it, are a few stronger bands of connective tissue which pass from the under and anterior surface of the diaphragm and from the fascia covering the psoas muscle to the fibrous capsule of the kidney. These are best marked at the upper end of the kidney and at the hilum, but there are a few also at the lower end. As they are constant they must, so long as they are uninjured, confine the up-and-down movement of the kidneys to a range equal to that traversed by the particular portion of the diaphragm to which they are attached, and when the kidney is forcibly pulled down this portion of the diaphragm may be seen to be slightly flattened. In cases of nephroptosis these bands are either torn or very greatly stretched. Wolkow and Delitzin, from a variety of experiments which they performed, came to the conclusion that they are of little or no use as a support for the weight of the kidney, to which they are quite unequal, and that their chief function is to maintain the normal shape of the kidney and the relative position of its various parts. Division of the upper strands leads, according to them, not to descent of the whole organ (so long as the other factors concerned in the support of the kidney are not interfered with), but to a kind of collapse of the upper segment, so that it falls forward and becomes bent upon the lower. This peculiar form of displacement, which has been called "anteversion of the kidney" by Potain, who described it, is said to be attended sometimes by symptoms of considerable severity, owing to the way in which the upper part of the kidney may fall forward upon the neck of the gall-bladder or the bile-duct and compress it. However this may be, it is certain, as Newman showed a long time ago, that if the abdomen is opened with the body suspended in the erect position, the kidneys, which are already at their lowest normal point, fall much lower even though these bands of fascia are uncut. Neither the fascia nor the fat, separately or together, is capable of maintaining the kidney in position when the influence of the abdominal pressure is taken away. The same may be said of the peritoneum, which passes over the ventral surface of the kidneys. It is considerably strengthened on the right side, according to Jonnesco, by a special fold which reaches from the under surface of the right lobe of the liver to the kidney and the duodenum; but in spite of this it does nothing to prevent mobility of the kidney. If the abdomen is opened while the body is in the erect position the kidneys sink behind the peritoneum without disturbing its surface. Forcible depression of the kidneys naturally causes it to become wrinkled, but the parietal peritoneum, even on the posterior wall of the abdomen, is so easily displaced that it has no difficulty in forming a loose pouch, behind which the most mobile kidney has full play for its movements. The kidneys, in short, normally are not fixed, and there are no ligaments or bands of fibrous tissue to fasten them. They are able to move through a very considerable range and the structures which surround them either move with them or give way before them. That the surrounding organs check their movement there is no doubt, and, owing to the way in which they are packed around, they support the kidneys, but the kidneys are not tied down—they are held in position, as Wolkow and Delitzin have proved by their experiments, partly by the pressure in the sub-peritoneal space and partly by the shape of the recesses in which they lie and the connective tissue which surrounds them.

Kendal Franks has described the right kidney as supported by the combined pressure of the liver and the hepatic flexure of the colon. The former presses the upper part of the kidney backward and downward. The latter presses the lower part backward and upward. The resultant of these two forces is a pressure purely backward; and Kendal Franks points to the presence of a transverse ridge passing across the middle of the anterior surface of the kidney as evidence of the meeting of the two opposing forces. But this is scarcely correct. It deals with the liver and the colon as if they were two independent structures, having no relation to each other or to any of the other organs in the abdomen—a condition of things which cannot possibly exist during life. As a matter of fact, the liver and colon (though they possess a small extra-peritoneal surface) and all the other organs contained in the peritoneal cavity form one whole, so far as any pressure upon the kidneys is concerned. So far as it affects by its pressure the extra-peritoneal organs there is but one soft elastic intra-peritoneal mass, the component parts of which are arranged in such a way that if any one of the individual organs changes in position or in consistence the rest compensate for it at once. But this, of course, is only possible so long as the peritoneal cavity remains intact. When once it has been opened and the air has entered into it each organ can be moved independently and exerts its own pressure.

Glénard regards the descent and mobility of the kidneys as merely one of the phenomena of enteroptosis, but his arguments are very far from carrying conviction. In the majority of cases in which the right kidney only is moveable there is no sign of enteroptosis. But when enteroptosis does occur so that the liver rotates forward and the intestines collect in the lower part of the peritoneal cavity the kidneys may descend and become unduly moveable owing to the relaxation of the upper part of the abdominal wall and the consequent diminution of pressure. Even this, however, is not likely to take place unless there is at the same time defective development of the lumbar recesses in which the kidneys are lodged. The kidneys are maintained in position partly by the way in which they fit into these recesses and partly by the pressure which is exerted upon them, in common with all the other structures in the sub-peritoneal space, by the muscles of the anterior abdominal wall and the elastic mass of the intra-peritoneal viscera. Neither of these forces is sufficient without the aid of the other. If the lumbar recesses are defective the kidneys may become unduly moveable even though nothing has ever happened to weaken the intra-abdominal pressure. Moveable kidneys, for instance, may occur in young women and even in children. I have had occasion to operate upon a girl only 19 years of age, whose muscular system was well developed, who had not had any children, and who had never suffered from ascites or any other cause which could possibly affect the intra-abdominal pressure. Yet there was characteristic flattening of the loin on the right side (pointing to defective formation of the lumbar recess) and one of the most mobile kidneys with a well-developed fatty capsule which I have ever seen. On the other hand, Newman, and more recently Wolkow and Delitzin, have proved conclusively that, even when the lumbar recesses are well developed, if the anterior wall of the abdomen is weakened while the body is suspended in the vertical position, even without opening the peritoneal cavity the kidneys sink at once below their normal level.

Wolkow and Delitzin in particular have drawn attention to the importance of the shape of the lumbar recesses. The difference that exists is best shown by taking plaster casts of the posterior wall of the abdomen after the kidneys have been removed with the body in the vertical position. In the male they are deep, narrow, and pear-shaped, with the narrow end below. In the female, corresponding with the greater width of the pelvis, they are shallower and more cylindrical. The difference in shape is almost always more marked upon the right side than upon the left. This, which explains the much greater frequency of mobility of the right kidney than of the left, is, I believe, dependent upon a slight degree of torsion of the lumbar spine. In right-handed people the dorsal spine is slightly convex towards the right. This entails, or, at any rate, this is accompanied by, an equivalent convexity towards the left in the lumbar region. But here the rotation of the vertebræ which necessarily accompanies lateral flexion swings the spinous processes round—making the line of the backbone appear straight again—and swings the transverse processes on the right side forward, carrying forward the muscles on the floor of the lumbar recess and making it so much shallower.

In a very large number of cases of moveable right kidney there is definite flattening of the right lumbar region. This, of course, cannot possibly be due to malposition or even to absence of the right kidney. Behind the right kidney are the eleventh and twelfth ribs and below the ribs are stout ligaments which pass from the transverse processes of the upper two lumbar vertebræ to those ribs. Absence of the right kidney can have no effect upon the contour of the back. If proof of this were needed it is supplied at once by the fact that no such flattening is seen after abdominal nephrectomy. In reality the flattening is a sign that the vertebræ have undergone a certain degree of rotation, and it is an indication of the cause of the displacement of the kidney, not a consequence of it. The width of the lumbar recesses is one of the penalties which have followed the assumption of the erect attitude. If the history of the development of the renal organs in the race as well as in the individual is worked out it is seen that originally they were distributed over the whole length of the head and body, and that by degrees, as their function became more specialised, they became concentrated together, until in their most perfect form they constitute a pair of organs which in the quadrupedal mammalia are placed in a position of the greatest possible security. They lie close to the spine, immediately under the anticlinal vertebræ, almost in the central axis around which all movement of the trunk and limbs takes place. They are buried in two deep and narrow recesses, protected by the lower ribs and resting upon a horizontal sheet of fascia which in its turn rests upon the viscera enclosed in the peritoneal cavity. The slight degree of backward and forward movement which is necessitated by the action of the diaphragm takes place without the least risk. With the assumption of the erect attitude, however, the greater portion of this security is lost. The backward and forward movement is altered to movement upward and downward in the direction of the line of gravity. The peritoneal viscera and the protecting fascia lie in front and not below. The lumbar recesses, instead of being deep and narrow, become broad. The convexity forwards of the lumbar spine helps to make them still more shallow. The pelvis, especially in the female sex, becomes wider so that the lower end of the recess becomes more open, and then, as a last straw, the development of right-handedness causes the transverse processes of the lumbar vertebræ which lie under the floor of the right recess to be thrust forward. From a position of the greatest safety the kidneys are placed in one from which almost all security has gone, and it is not to be wondered at that comparatively trivial causes, such as an increase in the weight of the organ without a corresponding increase in bulk, a sudden violent jerk, or a great lowering of the intra-abdominal pressure, can increase their normal range of mobility and force them downward. The wonder is, not that moveable kidney occurs, but that it does not occur more often. In this way, and I believe in this way only, is it possible to account for the peculiar clinical distribution of moveable kidney. It is certainly hereditary, and it is common. It is present in women much more often than it is in men, and in women who have borne children more often than in those who have not. It is also at least 20 times more common upon the right side than it is upon the left side. None of the other reasons which have been assigned for it, such, for instance, as the weight of the liver or the length of the renal vessels, is sufficiently probable to deserve consideration.

A true conception of the causes which lead to the development of moveable kidney is essential as a preliminary to treatment. Manifestly little can be done in the way of prevention. The general muscular development, especially that of the abdominal wall, should be encouraged as much as possible. Too much, however, must not be expected from this, for nephroptosis may occur in physically strong individuals, and it does not of necessity follow even when the abdomen is pendulous and absolutely devoid of tone. Over-use of the right hand and arm should be checked, especially in those families in which there is an inherited tendency to this complaint—for there is no doubt that it runs in families. Tight corsets and high heels should be discouraged, though I am not disposed to attach a very great amount of influence to either of these. The constriction of corsets as they are ordinarily worn descends too low to allow the compression of the ribs and of the liver to do much harm; and high heels, to which some French observers attribute great importance on the ground that wearing them causes increased convexity forwards of the lumbar spine, in England are not worn sufficiently high or sufficiently commonly to have any material effect. The greater frequency of displacement in multiparæ is only one reason among many more important ones why patients should not be allowed to get up too soon after parturition.

The treatment which should be adopted when the kidney has become unduly moveable must be guided partly by the intensity of the symptoms which it causes and partly by the range of the mobility. In many cases—I believe in the majority—the patient is not aware of its existence. In others moveable kidney is accompanied by the most severe distress, and this may occur even when the upper end only is detached, as in what Potain has called anteversion of the kidney. Whether, however, it causes distress or not I am convinced that it is an unwise thing to leave a freely moveable kidney wandering about uncontrolled at the back of the abdomen. Hydronephrosis from kinking of the ureter is not an uncommon result and even worse things may happen. Within the last few months I have seen four cases of complete destruction of a wandering kidney by calculus or tubercle. It may, of course, be said that the disease preceded the mobility and caused it by increasing the weight of the organ. I do not think so. I believe that the repeated slight injuries which a kidney must experience when it is freely moveable acted as the exciting cause in patients who were predisposed to these forms of disease. The left kidney in all the four was, if not intact, at least not sufficiently affected to prevent nephrectomy.

The choice lies between wearing an abdominal belt and nephrorrhaphy. In my experience it is only in the milder cases that the former of these two succeeds and then it must be combined with massage and exercises calculated to strengthen the muscles of the trunk. A belt braces the abdominal viscera together and so steadies the displaced organ, but it cannot press the kidney back into its place nor, if the kidney has been reduced, can it retain it there when the patient stands upright. The pads which are often recommended I believe to be entirely useless. For all cases in which there is manifest deformity of the lumbar region associated with moveable kidney or in which there is real distress I never hesitate to recommend nephrorrhaphy. In the former case I consider it advisable in order to save the kidney from a worse fate. In the latter I believe it to be the most certain method for giving relief. I have never known it to fail when properly carried out if the symptoms had not already lasted so long as to produce an indelible impression upon the patient's nervous system.

THE annual meeting of the governors and other supporters of the Leicester Infirmary was held recently, Mr. C. J. Phillips presiding. The annual report showed that 20,342 patients were dealt with during the year, an increase of 536. The income of the institution from all sources was £11,932 19*s.* 1*d.*, and the ordinary expenses amounted to £12,375 8*s.* 10*d.*, leaving a deficiency of £442. The report was adopted.—Dr. F. M. Pope moved certain alterations to the rules and also a new rule setting forth that the honorary staff and the surgeon dentist shall be elected by the council. Votes of thanks were passed to the governors, the medical staff, &c.

Presidential Address

ON

COLONIAL PRACTITIONERS AND THE PUBLIC.

Delivered at the Annual Meeting of the New Zealand Branch of the British Medical Association at Christchurch, New Zealand, on Feb. 19th, 1900,

BY WALTER THOMAS, M.B., C.M. GLASG.

GENTLEMEN,—I have experienced some difficulty in the selection of a subject for my remarks to-night owing to the circumstance that it is unusual to discuss a presidential address. Many suitable subjects under consideration had in consequence to be passed over through a dread of interfering with possible discussion. Certainly such a custom, however complimentary it may be to the President, has its disadvantage, but on the present occasion I have derived some measure of comfort in the reflection that it is an advantage to the President when he ventures upon such a subject as "Colonial Practitioners and the Public." Possibly, you will be inclined to agree with me in this when you have heard all I shall say on the matter.

The home practitioner who settles amongst us must early become impressed with the different relations which exist between medical men and the public as compared with those of the home country. Much of the difference observable may in a broad way be explained on the one hand by lessened sentiment and greater freedom of action and thought in the colonial layman, and on the other by a lack of true *esprit de corps* in the practitioner. In the earlier stages of a new country it is obviously not easy for the profession to take up a proper and assertive position in regard to its rights owing to isolation and the difficulty of concerted action, but in these more modern times there are many large centres each containing an adequate number of medical residents who can if so minded act together as a class and afford, by dignified professional custom and usage, aid and strength not only to themselves but also to their brethren in the country districts where they are more isolated. There are unions and self-protection combinations in the other professions and in all trades and we should be up and doing in our own defence. Unity of professional action is clearly necessary if we desire to obtain our rightful position in the busy world around us. Many of those present will, I am sure, bear me out when I assert that the colonial practitioner does not always know who is his patient and who is not. I have heard this stated by others on many occasions when discussing the subject, the usual conclusion arrived at being, Just make the most of your patient so long as he is your patient, for he is only making use of you in a temporary sort of way and will throw you up on the most frivolous pretext in order, perhaps, to consult a newly-arrived quack. When men of good reputation and standing feel justified in offering such questionable advice surely there must be something wrong in the relations between the medical man and his client. It is undoubtedly a fact that the colonial practitioner has but a frail hold on his patient and one which is exposed to many more hostile influences than is the case with the home practitioner. One of the Governors of Victoria at a medical dinner once said: "The medical man who visits a family in England is not only the medical attendant, he is the valued friend and companion. He is entrusted with secrets and confidences which are not given to others, however intimate they may be, and it is the glory of the profession that these confidences are never abused." This portrait of the British practitioner applies but faintly to his colonial brother. One would like to see our relations approximate more closely to those of the home country, where loyalty to the medical attendant is more general, where practices descend fairly unbroken from father to son, and where family secrets and knowledge of family constitutions are kept within a limited area.

Medical experience in the colonies assuredly encourages a suspicion that one's clients may roughly be divided into two sections: the first calling you in to prevent the annoyance of an inquest and the second doing so in order to have some one to blame should anything untoward occur. It is not a pleasant reflection that even those who call upon our services in the honest expectation of benefit to suffering humanity will also blame us when that expectation is not fulfilled. Such, however, is the usual result as seen in any lengthened experience. Although great advance has been made in medical knowledge during the past 50 years, yet we are all free to admit and deplore that we are still a long way from being able to fulfil the necessities of disease. It is not, however, to be doubted that every practitioner does his duty and his best in accordance with the present state of that medical knowledge. Under the circumstances it seems scarcely fair that we should be blamed for the non-possession of information which is at present unobtainable. In discussing my subject more in detail I shall first deal with the layman's share in the production of this unsatisfactory state of things. Later I shall have a few remarks to make in regard to those directions in which medical men themselves may contribute towards it.

THE LAYMAN.

1. *Instinctive antagonism to us as a class.*—Evidence of this is to be seen in any legal case in which the medical practitioner, individually or collectively, is interested. A medical friend recently arrived who was a spectator in a case of this kind expressed to me his astonishment at the way in which the public acted, applauding when the evidence told against the profession while preserving a virtuous silence when it went the other way. Unfair as such an attitude undoubtedly is, there are reasons which may serve to explain this hostility. First, the essence of manhood—the *virtus* of the ancients—is manliness, synonymous with excellence or perfection, and any deviation from the standard of excellence necessitating a correction at once and instinctively creates a feeling of inferiority in the one corrected, who, galled by it, forthwith visits his vexation upon the corrector. Question nurses as to how a male patient behaves when he is obliged to remain in bed. The answer will almost invariably be the same—that he seemed highly dissatisfied and grumbled and growled at all that was being done for him. In other words, he feels degraded physically from his high estate and vents his spleen upon those around him. Secondly, the receipt of medical benefits is popularly viewed as a luxury and not as a necessary. Indeed, it may be legally arguable whether a father can be forced to pay for medical attendance upon his child on the ground that the law holds him responsible only for the absolute necessaries of life, and it is questionable if medical attendance can be included in these. No man likes to pay for a luxury not specially arranged for by himself, hence it is irksome to most persons to have to pay a doctor's bill. The highest aim of the profession is to solve the etiology of disease and to lessen sickness or death by curative or preventive measures, and there can be little question that the sum total of human health and happiness has been much increased of late years almost exclusively through the efforts of members of our profession, yet when our voice is raised in the direction of sanitation, vaccination, and the like questions, we at once meet with strenuous and unreasoning opposition on the part of the public. I say unreasoning because common sense must point out that medical men would suffer considerably in income if attention to sanitation were a cardinal virtue, seeing that the larger part of our work results from the neglect of hygienic precautions.

2. *Objection is made to the fees as too high and that patients are thus driven to the chemist.*—On this point I quote one clever writer who says: "Considering the number of hospitals and clubs which everywhere abound in the colony, the number of quack medicines which are consumed, the frequency with which people resort to the chemist without ever thinking of going to the doctor at all, and the large number of persons who, when they do go to the doctor, never pay him if they can avoid it, it is just a little difficult to see where the opportunity for reduction of fees shows itself. The general practitioner, if not a club doctor, is driven into specialties. And yet when he gets a patient he is to consider whether half-a-guinea is not exorbitant. A patient who will go to a specialist and joyfully give a guinea to have a small mirror put at the back of his tongue and be told there is hypertrophy of his vocal cords, will elevate his eyebrows at having to pay half that sum for the opportunity of inflicting

a half hour's history of his aches and pains during the previous six months of his existence upon a long-suffering general practitioner who is no specialist. Specialist, consultation, and operation fees are paid almost without question, if not with joyfulness, while the poor half-guinea of the general practitioner is uniformly begrudged. He seldom gets a second consultation. His first prescription does duty over and over again, and is frequently lent to a neighbour. In visiting an account is run up and more than half such accounts are never paid. Patients remove to another address or to another town or colony, become insolvent, or flatly declare their inability to pay. Such a medical man works for nothing. The patient alone is benefited, and yet in the face of all this we are told that the fee is too high and counter prescribing is the inevitable consequence. The fact is that counter prescribing is carried on quite irrespective of any medical tariff whatever, and would go on if medical men charged nothing at all." A stated fee for intelligent advice is too commonplace; it lacks romance, and the layman will readily pay much larger fees for that which appeals more to his desire for the marvellous or mysterious. Club practice is a practical outcome of the desire for small fees, and tends to familiarise the public of the colony with nominal fees for medical attendance. Suggested probably by the outward show maintained by medical men, there is a prevalent conviction in the public mind that the profession is a lucrative one. We know that this, unfortunately for us, is not the case. We also know that the practitioner who charges nominal fees will not be able to make the two ends meet unless, perchance, he becomes the "fashion." Marie Corelli notwithstanding, we have not yet reached the stage of disembodied existence. We have to live and few of us practise our art for the sole pleasure of practising it. Year by year the profession is becoming less desirable as a means of livelihood owing to the multiplication of gratuitous medical services and the rapid growth of the club system, and it seems but reasonable that our medical unions should lessen this drain upon our services and so far as possible establish the money value of what we do. Surely the medical labourer is worthy of his hire. Working men themselves would not accept work at the fees which we frequently receive. No worker in the community gives so much of his time without payment as the medical man; he is the first approached for a subscription in all charitable objects and the sentiment largely prevails that he should work for "the honour of working" in the cause of suffering humanity. He is not expected ever to think of himself but only of his duty, and any suggestion about payment at the time is viewed as an outrage upon the feelings of the patient and his friends. One writer says: "The medical profession is regarded by a large class of persons as a very excellent institution designed by Providence for the world's good. We are readily assured that our calling is Godlike and that it is really the highest that any man can aspire to. We are therapeutic evangelists so long as we are willing to work for nothing and are ready to live upon praise, but when we mention the word payment we are base traders and have no sense of the loftiness of our calling."

3. *Lessened sentiment and ingratitude.*—In an earlier paragraph I stated that there was lessened sentiment in the colonies. This is true of the layman. All the same by a paradoxical effort of the mind he expects to find it amply exhibited by the medical man. The latter is at once designated "unfeeling and cruel" if he does not respond to a "call" at a moment's notice. The knowledge that such animadversions are calculated to damage us in the public estimation certainly may have the good effect of keeping us in the path of duty; still the position seems a little one-sided. We are subjected to many useless calls. On several occasions I have seriously inconvenienced myself in hurrying to a man said to have been thrown from his horse. In each instance I was unable to find either man or horse. Possibly I had been hoaxed, but more probably the man was drunk and, sobered by his fall, he had just climbed up into the saddle again and rode off. A medical friend of mine was on one occasion called out of bed to visit an urgent case. He was not well and said he would rather not go, but being kind-hearted he *did* go, to find that eleven others had also responded to the call. I am sure that every one present can relate similar instances. We seem very helpless in such cases. Practically no one is responsible, and our sole consolation is that we shall at least obtain credit in the hereafter for our response to charitable calls. I have myself experienced much comfort in this reflection and commend it to my medical brethren in these trying junctures. It is a very legitimate source of annoyance to the medical man that the layman so quickly loses the remembrance of the medical services rendered to him. Accustomed, as we all are, to profuse expressions of gratitude at the time it is only a very natural expectation that the memory thereof should be more lasting than it is. Recently in a local debt case where a doctor was suing for his account, the stipendiary magistrate, in giving him a judgment, emphasised this point, remarking that the time-worn stanza seemed as true as ever—

> "The devil was sick, the devil a monk would be;
> The devil was well, the devil a monk was he."

4. *Ethics.*—The medical man frequently comes into collision with the layman over ethical points. It is not easy to persuade a layman of the necessity for professional etiquette. He cannot understand that ethical observance is in reality in his own interests, a means of safety to himself, a protection against his own hysterical promptings or the mischievous interferences of ignorant but well-meaning friends. He cannot see why, in a free country like this, he is not permitted to have the independent services of several medical attendants, each recommended by a different friend. We who are behind the scenes know that it is simply the old fable of the "man and his ass" over again, and that the medical science not being a mathematical one the individual who trusts loyally in the shrewd judgment of his regular attendant has the best chance of a satisfactory result. Another difficulty arises from the objection of the orthodox practitioner to meet in consultation with an unscrupulous or heterodox one. We may dismiss the unscrupulous one, as here the objection is simply in defence of the regular attendant; but in regard to the heterodox we might very pertinently ask, What possible benefit could be anticipated from a consultation with such a one as, say, Dr. J. Hun Su of Pekin, who has been very successful in his treatment of uncomplicated typhoid, with the following prescription: R. Three inches of dried umbilical cord; one dried snake-skin; one fresh tom-cat's head. Mix, boil in five quarts of water for two hours, and strain. Sig. One tablespoon every four hours!

5. *Craving for specifics and encouragement of quackery.*—This is on a par with the mediæval search for the philosopher's stone. Nowadays it is a common thing to have a history of the absorption of a large quantity of patent medicines before the regular attendant is consulted. Recently I cut from a daily paper the following, which serves to emphasise this in a very ample way:—

> PATENT MEDICINES.—A witness, while giving evidence at the magistrate's court yesterday, was asked to explain what had become of a certain sum of money which he had possessed and which had somewhat mysteriously disappeared. In reply he stated that with a portion of the amount he had purchased, and what was more remarkable consumed, some 30 cases of patent medicines during a recent illness. "Poor man," sympathetically observed his worship, "and you are still alive?" "Oh yes," innocently replied the witness, "I have a pretty tough constitution." One of the counsel engaged then remarked, that so far from being a subject for sympathy, the man actually looked very healthy on his strange beverages. "Yes," replied the Bench, "he would make a good advertisement for the proprietors of the patent medicines if they could get hold of him."

This craving may be looked upon as the continued effort on the part of faith to overcome reason, and takes its origin from the evidence of miracles in the past, which we acknowledge as part of our Christian religion. Although our reason informs us that the days of miracles are long over, yet the public mind clings instinctively to the belief that such will occur again. It is, in reality, on the same platform with gambling, which all will readily acknowledge is rampant enough in the colony. Upon this weakness quacks of all kinds trade and thrive, for that which is not understood is proportionately reverenced. Indeed, the less it appeals to reason the more it recommends itself to the belief. In this district alone we have had startling evidence of the length to which followers of certain faddists would go in their unquestioning worship—as it were prostrating themselves before an idol the form of which was but dimly revealed to them. It is undoubted that in both the educated and the uneducated members of the community there is a strong bias in the direction of quackery and irregular practice. A knowledge of this fact is little calculated to encourage one to undergo the inconvenience and expense of a proper medical training, especially in view of the circumstance that charlatans are better protected than the orthodox practitioner. Their prosecutions result either in dismissal or in nominal fines, for magistrates will uniformly

sympathise with them and lean to the side of what they consider to be mercy. There is no reason why we should not be on the same footing as the legal profession in the matter of protection. At present *our* offenders are dealt with by the public, while the lawyers judge *their* own delinquents. If a lawyer be struck off the rolls for irregular practice and subsequently, say, prepares a conveyance he is at once brought up and, *not being a lawyer*, he is promptly fined and pays costs of application. As one writer puts it: "The public health is surely as important as the public wealth. The law impostor's mischief is not beyond repair, but that of the medical impostor may be irreparable. Why should it be less easy to punish offenders against our lives than against our property?" It is easy to say that the orthodox practitioner runs down irregular practitioners simply because they are irregular, but in every instance where exposure has thrown light upon their methods it has been shown that they are ludicrously ignorant, and it is simply inconceivable that they should find advocates. A distinguished journalist says: "It is natural enough that those suffering from any critical disease should desire to obtain the most efficient treatment, but what is not so obvious is that they should give the preference to unqualified practitioners. When the specific bubble bursts the world will then wonder it ever thought it other than a bubble, but more bubbles will rise from the froth of human folly, and so the world will go on, taking bubbles for pearls as long as human life and human nature and blind human trust continue to be what they are." The quack might well be designated a "social anomaly" which should not be permitted to exist in any intelligent community. That he is so permitted in ours displays an indifference to the common safety that is unpardonable, and may be taken as proof that we have only reached an incomplete stage of development. It may be said that every member of the community is born an amateur prescriber, but this only affects the professional prescriber when the amateur is enabled to obtain payment in one way or the other. Were it not for facilities in this direction there would be no medical pretenders.

THE MEDICAL PRACTITIONER.

I shall now say a few words upon the professional side of this question.

1. *Jealousy of each other.*—Our profession is a noble one, but, unfortunately, and more than any other, it is liable to the exhibitions of petty jealousy on the part of its representatives. "Do unto others as you wou'd have others do unto you" should be the sole guiding principle in our professional relations with one another. Undoubtedly it is a severe test to the best of us when offered the credit of being "better than t'other man," but it is manifestly unfair to the latter. In such cases we should, as honourable men, stand firm, and loyally smoothe matters for the man animadverted upon, knowing full well that in the whirligig of time we shall in turn occupy a similar position. Two wrongs cannot make a right and no man should risk the loss of his own self-respect through momentary gratification in scoring over his fellow-medico. Orthodox members of the profession should occupy one platform and act honourably and loyally to each other in all professional contingencies. Without this there must be disunion; as a class we are lowered in the eyes of the public and become a prey to any hostile influence that may be exerted against us.

2. *Popularity hunting.*—Up to a certain point this is legitimate, but it is unquestionable that the majority in the desire for position over-step the bounds of legitimacy and adopt methods for bringing themselves into public favour which are in nowise associated with their own professional knowledge or excellence. Herbert Spencer says: "Success in the world depends more on energy than upon information." The aptness of this aphorism is well exemplified in our profession where men frequently rise into a good position owing to their superabundant energy rather than to the possession of profound knowledge. Nowadays it seems that the particular aim of each medical man is to keep himself before the public, and activity in this direction is steadily increasing and becoming better defined. Whether it is by direct advertisement, gratuitous services, newspaper paragraphs, the public exhibition of new and soul-stirring but may be useless instruments, or by any other means suggested to the ingenious and resourceful mind, the object is alike the same—that of intimating to the public that the advertiser occupies a higher platform than his medical brethren. Direct advertisement, which is frequently the subject of discussion at medical society meetings, has at least the merit of being straightforward, and I venture to assert that the other methods of advertising are in reality even more objectionable. They constitute a bad education for the public and degrade us as a class. I have mentioned gratuitous services, and I think that the question of their propriety might very advantageously be discussed by our association, so that the opinion of the whole profession might at least be placed on record. When occurring, for example, in relation to the staff of a hospital these services tend to create a conviction in the public mind that medical services in any public position are honorary as a matter of course. Is it wise that, of our own accord, we should add to our list in this direction? I think not. In large centres it can scarcely be necessary; indeed, the only satisfactory reason I have heard advanced on the other side is where a university lecturer may require beds in a hospital for the sake of his students. Sentiment, selfishness, and indifference combine to keep the matter as it is and to prevent medical men from acknowledging the impolicy, to say the least, of continuing to work for nothing in such instances.

3. *Pandering to the wishes of the patient.*—Like the last item, this is justifiable up to a certain point, and is then recognised as "professional tact," to which no objection can be taken. In the twofold desire, however, of currying favour with the patient and of attracting other patients this tact is carried much further, with the result that those under treatment frequently obtain remedial measures which the attendant well knows are not warranted. It must appear manifestly absurd to the patient in his calmer moments that he should be permitted to direct his own treatment in any degree, and the broad effect of such tactics is to create a want of confidence and to encourage the public in formulating treatment generally for itself. "To be out of the fashion is to be out of the world," and we know that it is not so many years since alcohol was universally demanded by the public, and there is little doubt that the profession of the time met this demand in full. Although in the present day we are seldom blamed for any encouragement towards the alcoholic habit—and when we are I think it is undeserved—yet undoubtedly similar practices still obtain in regard to items other than alcohol. Again, to the man of ingenious mind who is alive to the possibilities of his surroundings the opportunity frequently offers of introducing a custom or fashion in treatment which may prove lucrative to himself while seriously damaging to his fellow practitioners. In this way chloroform and morphia are being brought more and more into evidence. It is axiomatic that no medical man should operate without a qualified anæsthetist. I believe that this rule is daily becoming more honoured in the breach than in the observance, and its transgression will go on unless haply checked by the occurrence of a series of disastrous episodes. It is a very natural assumption on the part of the public that such a transgressor is free from nervousness, and is at the same time less expensive. In the case of morphia the effect is so pleasant that the desire for it continues long after the necessity, and, sometimes, to save time, the patient is taught the use of the syringe. I may here say that in America this has largely increased the crave for the drug. In the same category may be placed the suggestion of preventives to conception in cases of repeated miscarriages and even in cases where the family has extended beyond the means of the bread-winner. It might be imagined that such a suggestion would be confined to the huckstering chemist and the like, but this is not so, for I have myself heard several medical men, otherwise irreproachable and of good standing, freely express their opinion in justification of such a suggestion.

4. *The contract to cure.*—This is frequently offered to the public as an attraction and is highly immoral. There is nothing that can make a radical cure of individual disease in all cases. Our list of specific drugs even may be reckoned on the fingers of one hand. One case of measles, pneumonia, typhoid fever, &c., will differ as much from another as the patients suffering will differ in mind and body. No medical man can foresee the contingencies that may arise and the treatment must be adapted to these. As I have previously said, the public has a strong belief in specific cures and I can recall during 30 years' experience several instances in which a particular cure has attained a certain measure of popular success. In each instance the profession was first blamed for not having discovered it and then for not making use of it when discovered.

5. *The acceptance of easily dispensed proprietary preparations.*—While fully recognising the merits of tabloids, wafers, and such-like in the practitioner's own hands I feel that we should exercise grave caution in assisting the public to employ these independently. It is practically an extension of the education which we afford to druggists who dispense our prescriptions, is a loss to us financially, and must prove a source of positive danger to the public.

In the foregoing I may seem to bear somewhat hardly upon the orthodox practitioner who works in accordance with his conscience, but in discussing the relation of the public and the practitioner I have found it as impossible to leave out the influence of the heterodox portion of our profession as that of the public itself. Again, there are various grades of heterodoxy. I believe that many practitioners are rendered heterodox by action of the orthodox themselves. I have always held that ethics should be included as an essential part of our medical training. Not being so included many a young and well-meaning colonial practitioner, through ill-advice, ignorance or thoughtlessness, may transgress the code, and being handled in an injudicious way is led to associate himself with those who desire unrestricted freedom in such matters. Nowadays the profession is being steadily reinforced from the tradesmen's ranks, and it must seem natural enough to a tradesman's son to advertise.

There can be little question that we have ourselves largely to blame for the hostile attitude of the public. One writer says: "There is no trade or profession in which such facilities exist for the grossest forms of imposition without fear of detection or punishment; it follows therefore that those who practise it should be gentlemen—men of education and strict honour." The medical man must alienate himself from all that in the slightest degree smacks of trade if he desires to preserve the high and dignified status of our calling.

In conclusion, I am sensible of shortcomings in my address. It has been rather hurriedly written, but I do not think that I have in any way exaggerated the position. Should anyone present hold the opinion that I have done so I must ask him kindly to ascribe it to my desire to impress members of the association with the wisdom of giving some thought to the subject of our relations with the public. If this be done I am sure that we will readily recognise the propriety of so acting that we shall not, as a class, place ourselves in a false light with the public, and the object of my address will be fulfilled.

THE LEES AND RAPER

Memorial Lecture

ON

THE EFFECT OF ALCOHOL ON THE HUMAN BRAIN.

Delivered at St. James's Hall on April 27th, 1900,

BY VICTOR HORSLEY, F.R.C.S. ENG., F.R.S.

[THE second of the Lees and Raper Memorial Lectures, inaugurated to perpetuate the memory and to continue the work of the late F. R. Lees, Ph.D., and Mr. J. H. Raper, was delivered before a crowded audience at St. James's Hall on April 27th under the presidency of Mr. AUGUSTINE BIRRELL, Q.C., M.P. The honorary secretary of the Lees and Raper Memorial Fund (Mr. JOHN KEMPSTER) explained the constitution and aims of the Fund and referred to the life and work of the founders. The CHAIRMAN in a short speech called upon Mr. Horsley to deliver the lecture.]

Mr. HORSLEY said that it was his duty to present the actual state of scientific knowledge on the total abstinence question which involved no emotional feelings, however much each one of them might be personally moved by the tragedies and the poverty brought about by alcohol. Though all scientific subjects had a socio-political bearing, care must be taken by scientists that such feelings and knowledge did not warp their judgment disproportionately. He would limit himself to the effects of small doses of alcohol on the brain. All drugs had what is called a selective action, inasmuch as they act by virtue of a chemical affinity with the different parts of their structure, acting with very different effect in so far as these same parts differed. As Professor Ehrlich had pointed out it was merely a question of chemical affinity. To study what parts of the nervous system alcohol, taken in small doses, attacked, it was necessary to first familiarise themselves with the various elements of the nervous system which investigation had shown to be the commonest points affected. The lecturer then proceeded to explain by the help of lantern-slides the structure and functions of the cerebrum and cerebellum, drawing special attention to the arrangement of the sensory and motor areas. The constitution of the small and large brain corpuscles was demonstrated in some detail and the sensory relation of the small nerve corpuscles to the muscular sense was shown. The combined sensori-motor function of the centres was explained, and the position of the large nerve corpuscles as out-going stations for nerve impulses was illustrated. The small nerve corpuscles were concerned in the function of sensory perception which was the foundation of ideation—that is to say, of intellectual thought. Sensation preceded the delivery of the motor impulse and in this relation the small corpuscles were affected first. The relation of the cerebellum to the cerebrum and its structure were then commented upon. In regard to the effect of small quantities of alcohol upon the central nervous system it was necessary to consider the results of the drug on the higher psychical functions of the brain—that is to say, on ideation or the intellectual thinking apparatus. The effect on the centres in the brain for voluntary action and the effect on the cerebellar membrane for coördination and automatic equilibration had further to be dealt with. After explaining by means of a lantern slide the associated fibres of the brain the lecturer went on to represent the necessity of understanding that the perceptive and associated brain-centres worked as a whole. The question arose, How were they going to investigate the operations of the brain as a whole? To find whether a brain worked as well after a small quantity of alcohol was taken as it did before some means of exactly comparing the condition of the activity of the brain under those different circumstances was necessitated. The easiest way to do this was to measure what was called the "reaction time." By the reaction time was meant that very small fraction of a second which was consumed by the nervous system during which it received an impression and executed some movement in answer to the reception of that sensation. It was a fraction of a second and in all minute and accurate records it was of vital importance—so much so that astronomers had to measure their reaction period and to allow for it in their calculations. A demonstration of the method of measuring the reaction time was then shown by an actual experiment. The method had been employed by numerous investigators, but by none with such complete accuracy as Professor Kraepelin, whose researches had this great advantage owing to their accuracy—that he had been able to explain the contradictory and doubtful results arrived at by previous observers. Kraepelin found that the simple reaction period, the mere response to a signal after the ingestion of a small quantity of alcohol, was slightly quickened, there was a slight shortening of the time as though the brain was enabled to operate in a shorter time than before. But Kraepelin found that very speedily—in the course of a few minutes—a slowing began and became more marked and endured as long as the alcohol was in active operation in the body. The time interval, of course, varied according to the individual experimented upon, but he found that the time spent by so-called complex reaction (a reaction in which there was an association of ideas) was never quickened by alcohol, and that the slowing effect of the alcohol began from the first and continued throughout, so that, on the whole, there was even with the ingestion of the small quantities of alcohol which were termed "dietetic" a very distinct and depressing effect on the highest centres of the brain. The subject had a picturesque interest also, for Kraepelin found, as did other investigators in his laboratory, the truth of that which had been written before—namely, that wine was a mocker. In investigating complex reaction periods involving more thought it seemed to Kraepelin that a small quantity of alcohol had an accelerating effect on the activity of his mind and that he performed the operations

of adding and subtracting figures and learning figures more quickly. When, however, he came to actually measure on the recording drum the exact period of time he found to his astonishment that he had accomplished these mental operations in a worse fashion than without alcohol. The alcohol, therefore, had a primary deceptive influence on the mind of this observer, and in this there was nothing very extraordinary, for all these drugs—alcohol, chloroform and so forth—produced much the same deceptive stimulation as a first effect. The lecturer explained how even a very moderate intellectual operation could be easily blotted out from the brain by giving the details of an experiment performed on himself, laughing gas being employed to secure the poisonous hampering influence. With reference to the effect of alcohol on voluntary movement it had to be remembered that the energy producing a single contraction of a muscle was manifested in an intermittent manner; it was not one impulse, it was a succession of impulses and that could be proved to be the case by means of suitable apparatus. The lecturer then showed by means of a lever, which exaggerated the intermittent movement, what actually took place in muscular movement.

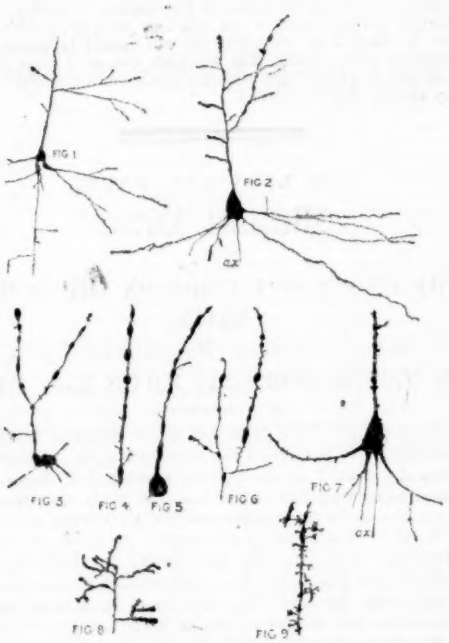
It could be understood from a consideration of these facts how under the influence of alcohol the normal summation was interfered with and what was known as a tremor was produced. But short of this result of tremor Kraepelin had investigated the effect of small doses of alcohol on the voluntary centres by means of a series of experiments with the dynamometer, which was squeezed at certain intervals for a certain time and the work done measured before and after the taking of a small quantity of alcohol. He thus obtained evidence of the amount of work put out from these centres. His results showed that there was at first an apparent additional amount of work put out, but that acceleration or stimulation was quickly followed by the usual lowering or depressant effect. Further, he found a very interesting fact: that if the person experimented upon had received not a dose of alcohol but a dose of tea there was no lowering effect exhibited in the experiment. This contrast between the effects of alcohol and tea was most marked in regard to volitionary movement. When he said that there was no lowering effect in the experiments with tea it must be understood that ultimately there was a certain lowering due to normal fatigue, but that was an element that applied to all experiments and therefore it did not affect the argument. It would be of interest if they could explain thoroughly the apparent acceleration of the putting out of work as the first effect of the alcohol during the first few minutes. It was not possible to satisfactorily explain this at the present time, but from the records of the effect upon the tremor, the natural rhythm of the output of impulses, it undoubtedly must be explained by the loss of control, and by that he meant that all their acts were under a certain brake-power like the governor of an engine. There was an apparent temporary increase of activity, but it was the increase of the same kind as the racing of an engine when the governor was removed.

This position was no new one. It had no doubt often been expressed from that very platform and it was conceived years ago by Aikin and other observers in this country and by theorists on the question of alcohol. It had been the consistent teaching of the greatest physiological chemist that they had on the continent—namely Professor Bunge. This apparent acceleration of the amount of work done was not to be regarded as a real thing but as an evidence of the paralysing and deleterious effect of alcohol. A very careful series of observations on the dietetic use of alcohol in connexion with skilled volitionary work had been made by Aschaffenburg, to whom it occurred to make experiments on certain compositors who offered themselves for the research at his suggestion. They were all skilled workmen; three of them were accustomed to drink small quantities of alcohol and the fourth occasionally drank to excess. Small intervals of time were taken and the total number of letters set up was observed under circumstances of normal conditions from which the necessary averages and observations of fatigue effects were obtained. In this experiment the maximal difference and chief inhibitory effect of the small quantities of alcohol was well shown during the second quarter of an hour and remained obvious until towards the end of the experiment when the effects were passing off. The generally disadvantageous effects of alcohol on persons who did voluntary muscular work were well known and it had, of course, been shown time out of number by the records of travellers and military expeditions that the best physical results were obtained under total abstinence from the use of alcohol. The conclusion, therefore seemed overwhelming that even in very small quantities—that was to say in dietetic amounts—alcohol had a most injurious effect on voluntary muscular work.

The next subject for consideration was the influence of the drug on the cerebellum. It was known that injury to the small brain was followed by loss of regulation and control of the movements and by the affection of the function of equilibration. This was especially true of the muscles of the lower limbs. The legs were most particularly associated with the cerebellum and standing and walking correctly in a coördinated fashion depended on the normal action of the cerebellum. One of the further effects of alcohol in slightly larger doses than those which they had been discussing was to destroy the special function of the cerebellum and to produce a sensation of tremor and weakness in the lower limbs so that the individual staggered slightly and found standing to be a matter of difficulty. It was also known from the recent researches of Dr. Risien Russell that the cerebellum might play the part under normal circumstances of damping the tremor which, as they had just seen, normally accompanied the discharge of energy from a nerve centre. Hence in alcoholic poisoning the exaggeration of the natural, intermittent discharge of the nerve centre producing tremor might be due in part to the loss of cerebellar controlling influence as well as dissolution of the cortical cerebral constituents.

In regard to the structural changes in the nerve cells from alcohol it had to be remembered that the poisoning was a chemical matter. It was known that an extremely small dose of certain poisons could cause death, and when it was borne in mind how the living chemical processes of the body were always on the brink of instability it could be understood that the passing effect of a small dose of alcohol

FIG. 1.

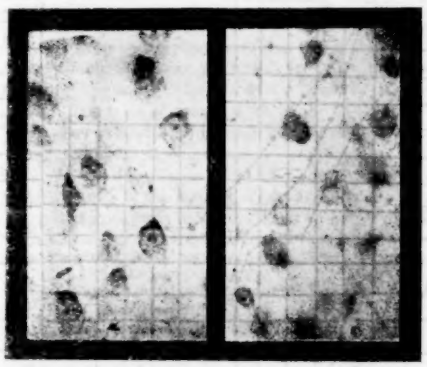


From the Johns Hopkins Hospital Reports, 1897, vol. vi., Plate V.

sufficient to upset the chemical activity of a nerve corpuscle was a matter of extreme difficulty to exactly demonstrate in a scientific manner. It was, however, worth while to study

the effects on nerve-cells of the prolonged use of alcohol. Under the influence of alcohol the granular masses in the Purkinje cells disappeared, the protoplasm of the body of the corpuscle lost its characteristic structure, and the nucleus was very greatly altered and distorted in shape. Under the toxic influence of chronic alcoholism the dendrites of the pyramidal cells exhibited swellings and shrinkages. A remarkable instance of the effect of alcohol on the small pyramidal cells had been shown by Nissl and the differences between such a cell in its normal condition and after poisoning by alcohol was demonstrated by means of a lantern-slide.

FIG. 2.



From the Zeitschrift für Psychiatrie, Bund liv., Taf. III., Fig. 5.

Finally, a remarkable constant feature of degeneration in the alcoholic person's brain was widespread pigmentation in the nerve cells. The presence of pigment in the nerve cells in the human brain was a normal fact and occurred in other animals, but in alcoholic poisoning it became exaggerated at the same time that the protoplasm of the cell shrank, so that ultimately the nerve corpuscle was represented by a shrivelled mass of pigment. In certain stages shown in a paper by Dr. H. Wright and Dr. M. Orange, published in Dr. F. W. Mott's Archives of Neurology under the auspices of the London County Council, the degenerating effect on the protoplasm of the bodies of the nerve cells was illustrated, clear bladder-like spaces or vacuoles being produced.

Mr. Horsley concluded by stating that he thought from a scientific standpoint that the previous contention which they had had so often put before them by their friends that small doses of alcohol such as people take at meals had practically no deleterious effect could not be maintained. He had only touched upon a very small part of the subject, but if they considered the mass of work that had been accumulated from the observations of Parkes on physical work, from those of Ridge on extremely small doses on vegetable protoplasm, and from the observations of Abbott and others on the influence of alcohol on animals in lowering their resistance to microbic invasion, they could only come to one conclusion: that from a scientific standpoint total abstinence must be their course if they were to follow the plain teaching of truth and commonsense. It was the part of the scientist to point this out but it was the part of the politician to persuade the nation to adopt it as a whole.

[The Very Rev. F. W. FARRAR, Dean of Canterbury, in moving a vote of thanks to Mr. Horsley, said that he considered that it was the duty of the nation to persuade the politicians, and he regarded the lecture as marking an epoch in reform.—Dr. W. J. COLLINS, in seconding the vote of thanks, said that Mr. Horsley had laid before them the latest results of science without bias and without partiality.—Sir WILFRID LAWSON, Bart., M.P., moved a vote of thanks to the Chairman which was seconded by Mr. T. P. WHITTAKER, M.P.—The CHAIRMAN having suitably responded the proceedings terminated.]

ST. JOHN AMBULANCE ASSOCIATION.—The Central Executive Committee of the St. John Ambulance Association has authorised the formation of a centre at Bath. An influential committee has been appointed with Colonel Wyndham Murray, M.P., as president.

OBSERVATIONS ON THE EPIDEMIOLOGY OF PLAGUE.

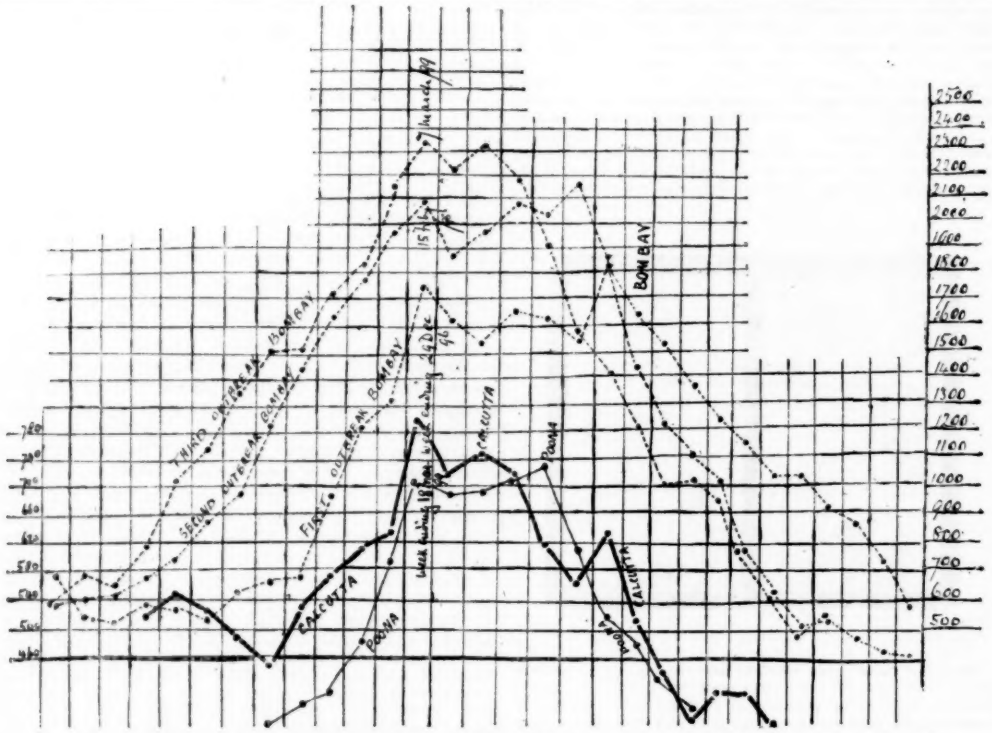
BY T. FREDERICK PEARSE, F.R.C.S. ENG., D.P.H. CANTAB.,
SPECIAL PLAGUE MEDICAL OFFICER, CALCUTTA.

THE accompanying chart shows the courses of the three successive outbreaks of plague in Bombay city and of one in Poona, and for comparison, but on a different scale, the course of the second outbreak of plague in Calcutta. The returns of the weekly general mortality are taken because these seem the most reliable estimate of the extent of the epidemic, the excess mortality above the average being for all practical purposes the amount of the plague. The official returns of plague are so utterly untrustworthy that in the absence of any other cause for an increased death-rate the excess mortality above the normal becomes the only guide. With regard to Bombay, it will be seen that each outbreak occupied about the same period of time. There is in each case the same rapid rise, the same fluctuating summit of highest mortality, and the same correspondingly rapid fall. The charts of each outbreak have been super-imposed in order to emphasise the corresponding weeks of highest mortality, but it must be clearly understood that these highest points did not occur at the same dates in successive years. The second outbreak in Bombay was seven weeks later in the season than the first, and the third occurred about three weeks later in the season than the second. Although the first outbreak culminated at the coolest period of the year, the second rose to its highest point as the weather was getting warmer, and the third outbreak showed its still higher range of mortality in the hot month of March. Again, the outbreaks at Calcutta and Karachi occurred during the hottest months of the year, that at Poona during the monsoon, and the Southern Mahratta country was devastated at the close of the monsoon and while the winter was coming on. These facts show that season and temperature have little or no influence in determining the rise or fall of an outbreak.

It will be observed that there is a break in the steady and continuous rise of mortality in the first and third outbreaks in Bombay. There is also a break during the fall of the same two outbreaks. In the Calcutta curve there is also a break in the rise and a very marked secondary rise for one week during the months of the fall. It is suggested that these are not accidental, but there is nothing upon which to ground an explanation. The fluctuating summit of highest mortality in each outbreak lasting from four to six weeks is very peculiar. The severity of each outbreak in Bombay can be roughly estimated as the average weekly mortality is between 500 and 600 and on this basis it is assumed that about 22,000 lives have been lost each year from plague alone.

These characteristics of a plague outbreak in a large city are reproduced in the chart prepared from the mortality returns of the city of Poona and to a certain degree also in that for the city of Karachi. The mortality in Bombay city at each outbreak, in Karachi, and in the previous outbreak in Poona, has been roughly estimated at 1 in 40 of the population, but in the last and third outbreak in Poona it has been much more severe—more than equalling in its devastating effects the two previous attacks combined—and carrying off nearly one in every ten of the estimated population. There appears to be no explanation to account for this and there is no parallel to it in any part of India. The chart for Poona, drawn on the same scale as that for Bombay, is very similar. Considering that this city has only about a sixth of the population of Bombay the terrible severity of the last outbreak is very evident. In comparing all the lines it will be seen that the week of highest mortality occurred in three of the outbreaks immediately before the decline.

Another point of interest, but which is not shown by the chart, is the heightened general mortality for weeks and



The chart shows the general weekly mortality in Calcutta, Poona, and Bombay. The thick line indicates the general weekly mortality in Calcutta from Jan. 7th to June 10th, 1899. The thin line indicates the general weekly mortality in Poona (third outbreak) from June 16th to Nov. 3rd, 1899. The broken line indicates the general weekly mortality in the three outbreaks in Bombay, the dates taken being in the first case from Oct. 6th, 1896, to April 27th, 1897; in the second case from Nov. 23rd, 1897, to June 13th, 1898; and in the third case from Dec. 13th, 1898, to July 4th, 1899. The figures in the vertical column to the left refer to Calcutta, and in that to the right they refer to Bombay.

months before the outbreak definitely shows itself. The decline, moreover, of each attack though rapid at first terminates slowly and a plague outbreak seems to linger on for weeks and months before finally disappearing. In Bombay city, however, it is doubtful whether there has been a single week clear since the declaration of plague in September, 1896.

With reference to the various diseases making up the general mortality it is important to note that other epidemic diseases were conspicuous by their absence. Cholera, dysentery, epidemic diarrhœa, and fevers generally were all, as far as imperfect registration indicates, considerably below the average. In Bombay relapsing fever was the only concurrent fever and in each of the above towns the mortality from cholera was exceptionally low. It only remains to give the figures of the weekly general mortality in Calcutta, Poona, and the three epidemics of Bombay upon which the accompanying chart is based.

I.—CALCUTTA.

Mortality for Week Ending Jan. 7th, 1899, and Following Weeks.

562	483	604	743	631	456
520	450	628	722	517	435
543	532	799	619	443	372
521	572	716	562	387	

II.—POONA.

Mortality for Week Ending June 16th, 1899, and Following Weeks.

126	357	1082	819	410	125
159	548	1087	625	305	109
205	815	1112	504	241	76
302	1102	1182			

III.—BOMBAY.

First Outbreak.—Mortality for Week Ending Sept. 1st, 1896, and Following Weeks.

667	606	772	1639	1640	1007
593	698	1051	1758	1465	970
618	663	1310	1726	1326	836
647	623	1416	1645	1258	671
720	704	1853	1911	1139	638
791	780	1711	1728	1141	558
634					

Second Outbreak.—Mortality for Week Ending Oct. 19th, 1897, and Following Weeks.

776	708	1540	2080	1303	633*
754	785	1726	2184	1202	589
741	835	1671	2137	1116	525
701	875	2067	2268	872	504
700	1061	2195	1938	725	448
682	1207	1974	1519	616	500
704					

* Doubtful.

Third Outbreak.—Mortality for Week Ending Nov. 8th, 1898, and Following Weeks.

645	788	1601	2431	1696	1047
604	792	1612	2312	1603	890
606	894	1803	2408	1305	711
616	1111	1907	2290	1099	594
679	1239	2249	2010	1127*	609*
688	1418				

* Doubtful.

REMARKS ON VASECTOMY RELATIVE TO ENLARGED PROSTATE AND BLADDER ATONY.

BY REGINALD HARRISON, F.R.C.S. ENG.,
SURGEON TO ST. PETER'S HOSPITAL.

IN a recent article[1] I ventured to state that "if vasectomy and castration in relation to prostatic enlargement had done no more than direct attention again to its pathology they would have served a useful purpose," and I then took the opportunity of illustrating some varieties in shape and structure that were included in the term "hypertrophied prostate." Hence I urged that it was about as reasonable to expect to find a uniform treatment for it as it would be in the case of what "enlarged breast" might be made to express. The mass of material which the student of morbid anatomy has now within his reach calls from time to time for its application to the purposes of classification and treatment. In no department of work is this more necessary than in the case of the urinary organs from whatever portion of the entire apparatus it is viewed.

It has been extremely interesting to follow the various communications that have been made during the last few years relative to the employment of vasectomy and castration in the treatment of prostatic hypertrophy. In some cases the results have been admirable, in others doubtful, whilst between these two extremes there have been various gradations. In my own practice since my advocacy of vasectomy in 1893 I have performed the operation in over 100 cases and I can say that whatever effects were exercised upon the prostate I have never seen any harm result or heard of any regret expressed from what followed other than that arising in a few instances from failure to obtain by comparison all the good that might have been anticipated. A number of these cases have now been under observation, or cognisance, for from one to seven years, so that ample opportunity has been permitted for noting what happened during varying intervals after operation. I have already referred to a previous communication in which stress was laid on the fact that there were structural conditions of the prostate when enlarged where shrinkage was unlikely to happen after either castration or vasectomy as illustrated by carcinomatous, fibrotic, and adenomatous glands. These all simulate the commoner form of prostatic hypertrophy and though vasectomy does no harm it is rarely followed in these instances by appreciable good.

The present communication has for its main object the demonstration of the existence of certain physical changes in the bladder arising out of chronic prostatic obstruction which are sufficient to negative or minimise the effects that would otherwise follow the induction of shrinkage of the prostate by such means as are under consideration. This point presents itself in three ways: (1) from the examination after death of persons who had undergone vasectomy or castration for hypertrophied prostate; (2) from the exploration of the interior of the bladder by suprapubic cystotomy under similar circumstances; and (3) from the examination of collected specimens illustrating various kinds of atonic bladders in persons who had been more or less dependent on the catheter with hypertrophied prostates. Of the first-mentioned I have met with two examples and of the second four. In five of these vasectomy and in one castration had been practised some months previously. In none of them was death caused or the operation of cystotomy necessitated by the vasectomy or castration, these events being brought about by independent derangements of the kidney or the bladder which arose out of the original state of chronic prostatic obstruction. All instances showed evidence of varying but marked degrees of prostatic shrinkage though the complications mentioned were uninfluenced. All had benefited to some extent from the shrinkage of the gland which had thus been artificially induced, though the improvement was chiefly confined to matters relating to catheterism and washing out the bladder, but none of these six cases had resulted in the restoration of the natural function of micturition or of catheter independence. The examination of the third group, which included a considerable number of atonic bladders associated with enlarged prostate removed after death from patients who had been more or less dependent on the catheter for long periods of time, indicated the nature of the commoner lesions met with in the bladder under the latter circumstances.

From one or other of these sources I was able to demonstrate (1) that the usual effect of vasectomy is to induce shrinkage of the hypertrophied prostate; (2) that though this shrinkage affords a readier access to the bladder for catheters and such like purposes it did not necessarily follow that voluntary and natural micturition was thereby restored, failure in this respect being mostly due to structural changes in the bladder itself arising out of long-continued obstruction; and (3) that the latter consists of certain kinds and degrees of sacculation, pouching, and trabeculation of the bladder whereby its voluntary expulsive power is permanently and frequently irrecoverably damaged.

That the usual effects of vasectomy on the hypertrophied prostate is to bring about in the course of time its shrinkage or atrophy is, I think, generally admitted. Further, it would seem that if the prostatic shrinkage thus induced is not followed by the cessation or improvement of the symptoms characteristic of prostatic obstruction, and which includes the return of natural micturition, it may be assumed that either the gland itself is at fault in other ways, as indicated in my previous paper, or that the bladder is now solely responsible for the failure.

The examination of the cases and specimens referred to previously in the three groups indicates that by far the commonest cause of bladder failure under these circumstances does not necessarily arise out of deterioration or loss of muscular substance requisite for expelling urine but is largely due to altered relationships between the mucous and muscular investments of the viscus. Take, for instance, as illustrations of the latter the sacculated, pouched, trabeculated, and herniated mucous coat bladders which are the common results of protracted obstruction. The power is there but it is misdirected. The mode in which a comparatively small sac in the bladder is capable of throwing the whole muscle "out of gear," to use a very apt term, is capable of demonstration in various ways.

Some years ago I saw a man, under 50 years of age, without any stricture or prostatic obstruction, who had met with an accident whilst hunting and was partially thrown from his seat when there was reason for believing that he had a distended bladder. He experienced some pain in the region of the bladder immediately, but was thought at the time not to be seriously hurt. Some weeks afterwards I was consulted by him for offensive urine and for difficulty in emptying his bladder, for which, since the accident, a catheter had been necessary. Eventually he became entirely dependent on the latter and died in the course of a few months from chronic cystitis. A herniated pouch of mucous membrane just above the trigone which would admit the last joint of the thumb revealed the primary cause of his illness from his accident to his death. There was no evidence during life or after death of spinal injury. It was clear that this protrusion of a pouch of mucous membrane through the meshes of the muscular coat had brought the natural function of the bladder somewhat abruptly to an irreparable end.

Again, from time to time I see a man, aged 50 years, from whom I removed a single urate stone of about the size of a small walnut, situated, or rather embedded, in a pouch just within the posterior wall of the bladder. The operation consisted in seizing the stone (which could only be felt with the side of a sound) with the lithotrite and putting it in a part of the bladder area where it could be readily broken into fragments and removed with the wash-bottle and evacuator. The embedded condition of the stone had previously interfered with the patient's expulsive powers and he was, before I saw him, largely dependent upon his catheter though he had no large prostate to account for this. After the stone was removed from the sac, though he was completely relieved from pain and regained his general health, he became entirely dependent upon his catheter—a circumstance which could only be explained by the structural alteration the bladder had thus undergone and which at his age is not likely to be remedied. I have had more than one instance of this and have recently reported two cases[2]

[1] THE LANCET, August 5th, 1899, p. 331.

[2] Two Cases where Multiple Calculi were Removed from large Narrow-necked Sacculi connected with the Male Urinary Bladder. Transactions of the Royal Medical and Chirurgical Society, vol. lxxxii., 1899.

where I had endeavoured to deal directly with sacs complicating vesical stone but with only partial and temporary success. Further, I have met with several instances in young males suffering from chronic strictures of the urethra where the strictures have led, as a consequence of straining, to the formation of comparatively insignificant sacs in the bladder which have so completely disarranged the expulsive mechanism of the viscus as to render the patients dependent upon catheters, with not much chance of ever regaining complete voluntary power even after the stricture has been successfully treated. Though it might at first sight seem a somewhat strained illustration to take, it may be said, I believe, that if the heart as the motor power of circulation were liable to undergo only a small portion of that structural damage which is not infrequent in the bladder as a consequence of opposition to its action, the average duration of human life would be curtailed. There is not much to choose between the difficulty of repairing a heart valve or a bladder wall structurally, as the case may be.

If these are some of the commoner effects of continued obstruction on the part of the prostate relative to micturition they seem to suggest that efforts might be directed to averting such consequences by bringing about artificially a shrinkage of the initial cause of obstruction at an earlier period than has hitherto been generally attempted. Some of the experience which I incidentally referred to before in this paper and which is mainly derived from watching cases for several years has an important bearing upon this point.

The best results of vasectomy have been met with in cases which may be said to have been on the border-line of the development of those structural bladder changes which the continued use of a catheter does not tend to remove, and which renders the instrument a necessary though an inconvenient institution. In at least a dozen cases what is known as catheter life appears to have been permanently averted by vasectomy. These cases included persons who were prepared to take a reasonable chance of avoiding the probability of being dependent on the use of a catheter for the rest of their lives, as well as others whose condition or usual employment rendered the attainment of this object a particularly desirable one.

Latterly I have further simplified the process of breaking the continuity of the vasa by substituting torsion for section, with a pair of Spencer Wells forceps, through a small incision over the duct. In this way the vas is seized and bared and a small portion of it is torsed out, no ligature being required. A suture for the skin wound and a collodion application on gauze completes the dressing. A week or 10 days' interval in dealing with the two vasa is advised.

So far as the function of the vasa is concerned, in contradistinction to what applies when castration is selected, I can only repeat with additional emphasis what I have already written[2] to the effect that the latter extinguishes sexual power whilst vasectomy does not necessarily appear to do so, though it obliterates the seminal ducts.

In conclusion, from this and from my previous paper the following deductions may be made:—1. That vasectomy has been shown to be specially effectual in the earlier stages of prostatic hypertrophy in effecting shrinkage of the gland and the restoration of the natural process of micturition. 2. That in cases where there is evidence to show that the prostate has in the course of degeneration assumed the form and structure of a fibrous growth the conditions are such, provided the symptoms of obstruction warrant the adoption of other measures than catheterism, as to render some form of prostatectomy preferable to either vasectomy or castration. 3. That where as a consequence of sudden or protracted prostatic obstruction secondary changes have taken place in the bladder itself, in the form of sacs, pouches, or trabeculation, the possibility of restoring its natural function by any means is extremely unlikely. Under such circumstances the induction of shrinkage of the enlarged gland will do good in affording a readier access for the catheter and in removing spasm, pain, or hæmorrhage connected with this or other similar process. In a further communication I hope to illustrate the practice of vasectomy under the various conditions to which I have now referred as viewed at considerable periods after operation.

Lower Berkeley-street, W.

[2] Stone, Prostate and other Urinary Disorders, Churchill, 1899.

THREE CASES OF SURGICAL INTEREST.[1]

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CASE 1. *Amputation of the breast for scirrhus in a patient of advanced age.*—The patient first noticed a small nodule in the left breast at the age of 80 years. In September, 1898, I was consulted about the lump, which had grown to the size of a hen's egg; it was very painful and was threatening to break through the skin. The growth was freely moveable and was very hard and nodulated. No axillary glands could be felt. On Sept. 4th, with the concurrence and assistance of Mr. Bernard Scott, Dr. H. G. Lys undertaking the responsible post of anæsthetist, I removed the whole breast by means of a widely curved oval incision. No attempt was made to remove the axillary glands, as in consideration of the age of the patient (82 years and seven months) it was deemed wiser to complete the operation as speedily and with as little shock as possible. The patient rallied well from the operation, and in a fortnight the wound had soundly healed in its whole length by first intention. I have been unable to find any record of the age of patients operated upon late in life, but in the cancer records of the Middlesex Hospital Mr. T. W. Nunn tabulates 160 cases and only one out of that number, or 0·62 per cent., occurred in patients over 80 years and between 80 and 85 years of age. In Sibley's table of statistics the oldest patient attacked with cancer of the breast was aged 84 years, but no mention is made as to whether an operation was performed or not. The case here described is of interest because of the onset of the disease occurring after the patient had attained 80 years of age and from the facts that the operation was so well borne and the wound healed so satisfactorily by first intention. Up to date there has been no sign of recurrence.

Note.—Three months later the patient had an attack of hemiplegia, and she subsequently had severe pain in the back with softening of the last dorsal and first lumbar vertebræ (probably cancerous). She sank from exhaustion and died in June, 1899, 10 months after the operation, without any sign of recurrence in the breast.

CASE 2. *Ruptured pyosalpinx complicated by fibroid tumour of the uterus; abdominal section; hysterectomy; recovery.*—The patient, a widow, who had suffered from menorrhagia for some years, was in hospital four years ago under Dr. Cullingworth suffering from inflammation of a uterine fibroid growth. Dr. Cullingworth examined the patient in March, 1898, and reported that there was a uterine fibroid of the size of a cricket-ball in the anterior wall of the womb. He did not advise an operation. There was no sign of peritonitis. The patient had pains in the back and felt ill in August, and these pains continued up to Sept. 13th when she complained to Mr. F. Scorer of pain and tenderness in the hypogastric region and of general malaise. The temperature was 101·6° F. On vaginal examination the tumour in the wall of the uterus was tender on pressure but there was no fixation of the uterus. On the evening of the 14th the patient had a rigor, her temperature being 102°. She also had a violent pain of a tearing nature in the hypogastric region extending to the lumbar region and the back. On the 15th a swelling was noticed to the right of the middle line extending into the right iliac region. On the 16th the patient had another rigor and she felt a movement as of something bursting. The tumour on the right side had disappeared and the pain had left the abdomen. On the 17th there was another rigor at 6 P.M., and the temperature was 105°. The patient was now admitted to the hospital. On admission the temperature was 102°, the tongue was dry and furred, the abdomen was swollen, and there was a slight pinkish discharge from the vagina. At midnight the patient was put under an anæsthetic and, assisted by Mr. Scorer, I opened the abdomen in the middle line from the umbilicus to the pubes. The uterus was enlarged and occupied the whole length of the wound, but the pelvis could not be properly examined owing to the size of the fibroid growth. A wire

[1] A paper read before the Bournemouth Medical Society on March 15th, 1899.

écraseur was passed round the lowest portion of the uterus just above the vaginal roof, but owing to the breaking of the wire when screwed up and no other écraseur being available, a silk ligature was passed round the uterus at, or a little below, the site of the wire and the uterus was removed above the ligature by snipping with scissors. The broad ligaments on either side were ligatured at the uterine and ovarian ends, and the whole of the sloughing abscess cavity was removed between these ligatures on the left side, and as the right tube also showed signs of inflammation and another pyosalpinx was forming it was treated in like manner. The peritoneum was thoroughly flushed out with warm boric lotion, a Keith's glass tube was inserted, the abdominal wound was closed with deep and superficial sutures, and the patient was put back to bed. The operation lasted one hour and 40 minutes, much delay being caused by the breaking of the wire of the écraseur and by the precautions necessary to avoid contamination through the cervix. The raw edges of the stump of the pedicle were sewn across with fine and close sutures. It is worthy of note that beyond venous oozing there was no hæmorrhage, not one pair of Spencer Wells forceps being used throughout the operation. The temperature remained practically normal for nine days following. There was then a rise caused by the sloughing of the pedicle, but the wound was syringed out twice daily with boric lotion, and for a week the temperature gradually fell and then rose again for two days. Four weeks after the operation the temperature ran up to 103° and for nine days there were evening rises of temperature with morning remissions until the pedicle sloughed off and came away. The temperature then fell and remained normal until the patient's discharge from the hospital on Dec. 1st. The sinus had not then completely healed, but I hear from Mr. Scorer that the patient has since been able to discharge her usual duties. The wound has now perfectly healed. There is a slight purulent discharge from the vagina and, strange to say, the patient has menstruated regularly, presumably from the mucous membrane of the remaining portion of the cervix.

CASE 3. *Trephining for threatened cerebral abscess; urgent symptoms of meningitis; arrest and recovery.*—A girl, aged 12 years, was brought home from school suffering from aphasia and right-sided hemiplegia. She had gone to school quite well, but for some time she had suffered from headache and had had nystagmus, and an oculist who was consulted found grave defect in the left eye, the character of which defect, however, was not noted. The patient was unable to read with that eye unless she wore glasses which the oculist had ordered for her. I was not called in until the day following her arrival home from school. The patient lay in bed with her legs drawn up and her arms folded on the chest. She was irritable and resented being touched, and she was intolerant of light and noise. She had vomited on that morning. The temperature was 98·4° F. and the pulse was 72. The patient was not able to speak and there was partial consciousness only. She put her hand constantly to her left ear and the head was hotter there than elsewhere. When she was asked to put out her tongue there was a considerable interval before she could make the attempt and then the tongue was scarcely protruded beyond the teeth. This state continued for two days, when the pulse had fallen to 68. The next day it was 60 only, but the patient seemed a little more conscious and had played with a doll. At 12.45 P.M. on this day (the fourth day of the illness) the patient had a convulsion and up to 6 P.M. she had 17 convulsions. The right arm and leg and the left side of the face were most markedly involved, the eyes rolled inwards, and the face became livid. The fits varied in length from half a minute to several minutes in duration. The pulse was slow and irregular. The temperature rose to 101·2°. The respirations were slow and laboured. There was no tache cérébrale, nor was there any cry before the onset of a fit. The pupils were equal and dilated but reacted sluggishly, and there were no optic neuritis and no tubercles in the choroid. On the next morning at 8.30 (the patient having meanwhile been removed to a private hospital) the head was shaved and an anæsthetic was given. A semi-circular flap was raised above the left ear and a trephine was applied one inch behind and one inch above the external auditory meatus. Just before penetrating the inner table the lower tooth of the trephine penetrated the upper border of the lateral sinus, the oozing of a large quantity of dark venous blood announcing this accident. The ring of bone was quickly removed with an elevator and the sinus was plugged with a long strip of sterilised gauze. The dura mater was much injected and was bulging with considerable intra-cranial pressure. It was incised and the brain substance bulged prominently through the small opening. No tubercles could be seen on the brain surface. A grooved needle was passed into the brain substance upwards, forwards, and inwards in the direction of the ascending frontal convolution, downwards and slightly forwards to the temporo-sphenoidal lobe, and backwards towards the cerebellum, but no pus was found. An exploring needle mounted on a syringe was then passed directly inwards towards the lateral ventricle with a view to draw off any excess of intra-ventricular fluid, but no tangible amount of fluid was withdrawn. The wound in the dura mater was then closed with sutures, the plug was left in the lateral sinus, and the wound was closed with stitches so far as the plug allowed. The patient had no more convulsions (there had been four during the night preceding the operation) and the next morning she was quite bright. She was able to talk and to protrude her tongue with only slight hesitation. There was no headache and there had been no vomiting. Three days after the operation the wound was dressed under an anæsthetic. Hæmorrhage occurred from the sinus when the plug was removed. The wound was syringed out with 2 per cent. of lysol and again plugged with sterile gauze. Four days after (a week after the operation) the wound was again dressed under chloroform. There was no hæmorrhage from the sinus when the plug was withdrawn, so the wound was again syringed out and lightly packed. A quarter of a grain of grey powder was given every three hours directly after the operation and was continued for a fortnight. The medicine was then given at gradually extended intervals and finally it was discontinued three weeks after the operation. The temperature never rose above 99°. The wound slowly healed and now the patient is quite well, responds quickly when spoken to, can read and write without the help of glasses, sleeps well, and is able to walk and run about as usual.

Bournemouth.

A Mirror of HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A SERIES OF CASES OF ABDOMINAL INJURIES WITHOUT EXTERNAL WOUND TREATED BY LAPAROTOMY.

(Under the care of Mr. G. R. TURNER.)

WHEN a severe blow is inflicted on the abdomen two injuries especially are liable to occur, hæmorrhage and perforation. Hæmorrhage to a dangerous extent is only likely to take place from solid organs, such as the liver, spleen, and kidney, while perforation will naturally only occur in the case of hollow viscera. It is extremely difficult to diagnose these conditions, but severe collapse after an abdominal injury will always justify an exploratory laparotomy. To diagnose *between* these two conditions is still more difficult, but on the whole it may be said that with hæmorrhage the pulse steadily grows softer, while with perforation and extravasation the pulse hardens. In Mr. Turner's interesting series of cases many of the more important points in connexion with these injuries are well illustrated.

CASE 1. *Ruptured bowel without external wound; operation; recovery.*—A man, aged 58 years, was admitted into St. George's Hospital under the care of Mr. Turner on March 31st, 1898, with the following history. The patient had been ruptured on the left side for 12 years, but had never worn a truss; he was otherwise a strong, healthy man. On March 31st he was helping to carry three hundredweight of lead on his head, when he stumbled and his burden struck the lower part of the left side of the abdomen and region of

the left spermatic cord. The rupture, which was down at the time, was said to have gone back at once. The pain felt was excessive. On admission the patient was collapsed and in great pain. A thorough examination under the circumstances was impossible. The lower part of the abdomen and left scrotal region were much bruised. No swelling was to be seen. He vomited brownish fluid twice after the accident. A catheter was passed and clear normal urine was drawn off. Mr. Turner made the diagnosis of ruptured bowel and advised immediate laparotomy; but it was not until five hours after admission, as the pain increased and signs of collapse strengthened, that the patient gave his consent thereto. By this time there was a large swelling of the scrotum in connexion with the left testicle, which previously had not been noticed. An oblique incision over the cord and external ring was made. The swelling above mentioned was exposed and was found to be an acute vaginal hydrocele containing perfectly clear fluid; the sac of this was removed. The inguinal canal was then laid open and was found to contain a thick-walled hernial sac. On laying this open there escaped a quantity of brown fluid, bile-stained and without much odour. A portion of small gut, itself uninjured, was adherent to the sac. The incision was thereupon prolonged vertically upwards for about three inches, completely opening the abdominal cavity. A piece of small gut was at once brought to the surface presenting on its free edge a zigzag rent about three-quarters of an inch in length with mucous membrane pouting. There was some recent lymph on a coil of small gut which presented. The rent was united—the mucous edges with five interrupted silk sutures and the serous and the muscular coats with 11 Lembert's stitches. The abdominal cavity was then flushed out with hot water, the intestines were returned, and a Keith's glass tube was placed in the upper angle of the wound; the hernial sac was removed and the peritoneum was sutured with catgut. The cut edges of the internal oblique and transversalis were united to Poupart's ligament by two kangaroo tendon sutures. The cut edges of the external oblique were adjusted to each other in the same way. Fishing gut was used for the skin sutures. A rubber tube was placed in the scrotum. The patient returned to bed in a fair condition after the operation which lasted altogether about one and a quarter hours. On April 1st he had vomited seven times since the operation green, thin, bilious fluid. Nutrient enemata were returned during the night; he had retained one, however, that morning. He complained of much pain in the abdomen. The pulse was 102 and the temperature was normal. The tongue was dry in the centre; it was not coated. The glass drainage-tube was removed and two rubber ones were substituted. On the 2nd the vomiting had ceased and the patient felt better. The pulse was 84 and the temperature was normal. He was given a little peptonised milk by the mouth. The wound was dressed and looked well. Nutrient enemata was given every six hours and were well retained. These were continued until the 5th, after which the patient was fed entirely by the mouth. His abdominal condition throughout was satisfactory. The stitches were removed from the wound on the 8th and all drainage was discontinued by the 18th. The bowels acted three times on the 3rd and after that daily for a week. His convalescence was slightly prolonged by some bronchitis from which he was apparently suffering at the time of the accident.

CASE 2. *Ruptured kidney; nephrectomy; recovery.*—A man, aged 57 years, a coachman, was admitted into St George's Hospital on May 4th, 1893. He stated that whilst loading some luggage on the top of an omnibus he lost his balance and fell from the roof to the ground. On admission he was very collapsed; he was ashy grey in colour and the surface of his body was cold and sweating. His pulse was very weak and there were signs of internal hæmorrhage. The house surgeon passed a catheter a few hours after his admission and drew off urine, which at first was quite clear but afterwards consisted of nearly pure blood. Mr. Turner diagnosed a ruptured kidney and decided to operate. An incision six inches in length was made through the right semilunar line in order at the same time to ascertain the condition of the other abdominal viscera. There was considerable retro-peritoneal extravasation of blood which was partly encircling the ascending colon. The kidney was exposed by an incision to the outer side of the latter and was with difficulty discovered owing to the masses of blood-clot with which its torn fragments were surrounded. It was found torn in half transversely with several minor lacerations of its surface. The cut peritoneum along the outer side of the colon was stitched to the parietal incision in order as far as possible to shut off the general peritoneal cavity. The patient was very collapsed after the operation but recovered after a hypodermic injection of strychnine and digitalin. He vomited once or twice after the anæsthetic but not again after the afternoon of May 5th. His urine was clear by the 6th and he passed some 56 ounces. His pulse was tense and varied between 75 and 90. His temperature was 99° F. in the morning and about 100° at night. There was considerable tension on the stitches uniting the nephrectomy wound but otherwise his condition was in every way satisfactory. On the eighth day after the operation some suppuration was present in the stitch tracks and the skin around was angry and inflamed; the stitches were consequently removed; there was no gaping of the wound after they were taken out. During the afternoon the patient had a violent attack of coughing, the edges of the wound were burst open, and some intestine protruded into the dressings. This was replaced, the wound was sutured with fishing-gut, and a drainage-tube was re-inserted. The patient was practically none the worse for this *contre-temps*. There was never any symptom of peritonitis, his chief trouble during the next fortnight being an attack of bronchitis, of which the fit of coughing was the onset. On the 27th there was a little pus and blood in the urine. The bladder was washed out with a solution of sulphate of quinine and the urine afterwards remained clear. The stitches were all removed by the 31st and the abdominal wound healed without further incident. He was up and about the ward on June 20th and was discharged from the hospital on July 12th. The amount of urea and the quantity of urine passed were from time to time carefully estimated. He passed 2·45 per cent. of urea on May 11th and 2·6 per cent. on the 13th and 18th; at a later date the percentage was 2·3. He passed 56 ounces of urine on May 6th, 78 ounces on the 8th, 68 ounces on the 9th, and 64 ounces on the 10th. The amount of urine passed depended largely on the amount of fluid taken, varying from 40 to 80 ounces during the last ten days of his stay in the hospital; when he was on ordinary diet the amount averaged some 45 ounces. When last seen (June, 1899) the patient was quite well and had been pursuing his work ever since his discharge.

CASE 3. *Ruptured kidney and liver.*—A man, aged 24 years, was admitted into St. George's Hospital on April 1st, 1898. He was struck on the right side of the abdomen by the pole of an omnibus whilst crossing the road. He fell and was unable to rise and was taken to the hospital at once. On admission he was extremely collapsed, pale, sweating, and well-nigh pulseless. Much tenderness was complained of over the right lower ribs, but no crepitus or other sign of fracture was detected. There was some bruising of the right loin. The urine passed was almost pure blood. His general condition was such as to contra-indicate any operation. The next day he had improved; the urine contained blood but in less quantities. There was some tenderness over the upper part of the abdomen and the right lower ribs. He was very thirsty and complained of pain in the back. He vomited on the night of admission and again the following morning. His pulse was 108 and good. His temperature, which had been sub-normal on the day of admission, was now 98°F. The following day it had risen to 99·6° and the patient seemed scarcely so well. Towards evening he became worse; he was thirsty and restless; the abdomen became distended and dulness was noticed on the right side and right flank. The patient was continually vomiting and his temperature had risen to 100·3°; the pulse was 112. The bowels had not acted in spite of an enema. Mr. Turner decided to open the abdomen. This was accordingly done by an incision in the right semilunar line. There was no peritonitis. A large extravasation of blood was found behind the peritoneum all round the kidney and ascending colon, the latter of which was black in colour owing to extravasation of blood underneath its peritoneal coat. Some free blood was present within the peritoneum in the pelvis; this was removed and was due to a laceration of the liver and was not of recent origin. All hæmorrhage from this source had obviously stopped. The retro-peritoneal extravasation of blood was very extensive, going behind the peritoneum right over the great vessels and surrounding the sympathetic plexuses about the aorta. A drainage tube was inserted and the external wound was closed. The patient recovered fairly well from

the shock of the operation, but continued to vomit and his urine still contained blood. On April 5th he seemed much better and had vomited but once. The laparotomy wound looked well, there was no distension in the abdomen, and his temperature, which had been 102°, fell to normal. He was given food by the mouth and it seemed as if he had a fair prospect of recovery. This improvement was not, however, maintained, and although his bowels acted daily after the 6th and he had no signs of peritonitis, the abdomen throughout being soft, he continued to be troubled by vomiting and hiccough and gradually sank. He was transfused on the 9th but only with temporary benefit. He died on the morning of the 10th, nine days after the accident and one week after the operation.

Necropsy.—Post-mortem examination showed the absence of peritonitis and retro-peritoneal extravasation of blood, chiefly on the right side, about the upper end of the kidney and behind the cæcum and ascending colon. This extended in diminished quantity to the neighbourhood of the left kidney, which was normal. The right kidney was much lacerated, part of the medulla and cortex being in a state of pulp. There was some pneumonia, chiefly on the left side, and about half a pint of sanious fluid was found in the right pleural cavity.

CASE 4. *Ruptured pancreas and duodenum.*—A girl, aged 17 years, was run over by a cab, the wheel passing over her abdomen. She was admitted into St. George's Hospital on May 29th, 1898, under the care of Mr. Turner, with signs of grave abdominal injury. She was much collapsed and the abdominal wall was rigid, tender, and bruised. There was considerable abdominal pain and she had vomited. Immediate laparotomy was performed. A rent of the serous and muscular coats of the ascending colon was found and sutured. There was no actual penetration of the cavity of this portion of the bowel, but on exposing the duodenum a rupture of its second portion of about the size of a sixpence was discovered. This was sutured by means of Lembert's stitches and the abdominal cavity was cleansed and closed. The patient never completely rallied from the shock of the accident and operation and died the next day.

Necropsy.—Post-mortem examination showed absence of peritonitis. The head of the pancreas was smashed and formed a pulpy mass with much extravasated blood that had come from the portal vein; this blood tracked round the right kidney and adrenal body, passing along to the tail of the pancreas. The injuries of the ascending colon and the duodenum were as described above.

CASE 5. *Traumatic volvulus of the small intestine; laparotomy; recovery.*—A boy, aged seven years, was admitted into the Seamen's Hospital, Greenwich, on July 25th, 1891, having fallen from a height of 12 feet against the pole of a boat and then into the river mud. He was much collapsed and vomited several times. He soon became restless, with abdominal pain and tenderness referred chiefly to the right iliac fossa. The vomiting continued and acquired a fæcal odour. Mr. Turner was sent for, and some 24 hours after the accident he opened the abdominal cavity. There was no evidence of any rupture of the intestine and no general peritonitis was present. A mass of entangled intestines (ileum) was felt to the left of the middle line. This was easily unravelled. On examining the intestine two collapsed, flattened parts, one foot and two feet in length and separated from each by about four feet of intervening intestine, were discovered. The collapsed gut at either end passed abruptly into the neighbouring intestine. There was no tear or rent found in either mesentery of omentum and no band of any kind was discovered. There was no further vomiting after the operation. Flatus was passed on the second day and the bowels acted naturally on the eighth day. The patient made an uninterrupted recovery.[1]

Remarks by Mr. TURNER.—In Case 1 there was rupture of the small bowel within the abdominal cavity. The adherent bowel in the hernial sac was uninjured, but by its fixation it allowed the neighbouring coil to be crushed against the brim of the pelvis. Before operation the rapid swelling of the scrotum, due to the acute hydrocele, appeared to indicate rupture of the bowel within the hernial sac. The successful issue of the case was no doubt due to the more or less empty condition of the bowel ruptured and to the comparatively early operation. The radical cure of the hernia and the hydrocele when the man was seen some months after the operation appeared to be complete, but as the operation for the radical cure was of necessity a rough-and-ready proceeding it was thought advisable to order a light truss to be worn.

Of the two cases of ruptured kidney the one associated with a rupture of the liver (Case 3) was first admitted and it was from observation of this case that I decided on nephrectomy in Case 2. The patient in Case 3 appeared to die worn out by perpetual vomiting, although there was nothing to account for this except the extensive retro-peritoneal extravasation of blood. Actual bleeding from the ruptured kidney had evidently stopped at the time of the laparotomy. The intra-peritoneal hæmorrhage from the rupture of the liver had been trifling and had also ceased. The cause of the persistent vomiting in the absence of all peritonitis is not easy to determine, but I am inclined to think that the large nervous plexuses at the back of the abdomen surrounded by clotted blood may have had something to do with it. I selected the abdominal rather than the lumbar incision for both operations, as although it appeared certain that the kidney in each case was injured it was by no means certain that this was the only viscus hurt. The collapse, pain, and vomiting were quite compatible with a concomitant injury of the bowel and in one of the cases a rupture of the liver previously unsuspected was detected. If a surgeon can be absolutely sure that the kidney is the only viscus injured he should doubtless choose the lumbar incision, but an injury sufficiently grave to rupture a kidney may very possibly have injured some other of the abdominal contents, and for this reason the abdominal method seems to me to be the better one, allowing, too, as it does, an examination of the opposite side before a nephrectomy is decided upon. Only those cases which threaten to prove fatal from hæmorrhage demand primary nephrectomy. In both the present cases there was distinct and rapidly progressing dulness in the flank on the injured side, and this should undoubtedly be looked for as a valuable guide as to the necessity for exploration.

Case 4 is perhaps worthy of record insomuch that the pancreas was ruptured, an organ that is stated in some textbooks to be the exception to the rule that all the intra-abdominal viscera are liable to injury. The case illustrates, too, the multiplicity of these injuries, an argument in favour of abdominal over loin incisions even when the kidney is known to be injured.

The preceding cases, together with one of traumatic volvulus of the small intestine (Case 5), in which a successful laparotomy was performed, formed the text for some clinical lectures I gave last summer on Some Injuries of the Abdomen without External Wound. It must often be difficult for a surgeon to decide in such cases when he will operate and when he will hold his hand, and to lay down any general rules on the subject is all but impossible. Each case must be judged on its own merits. Everyone must be familiar with cases of grave abdominal injury that have recovered without operative interference and museum specimens showing repair of ruptured solid viscera are common. When, however, it would seem a hollow viscus is injured or that fatal hæmorrhage is threatening the surgeon's duty of exploration is a clear one, unless indeed the attendant shock and collapse are such as to render operation hopeless.

[1] This case was shown at the Medical Society of London on Oct. 23rd, 1892.

LEEDS GENERAL INFIRMARY.

A CASE OF KYPHOTIC PELVIS.[1]

(Under the care of Dr. J. B. HELLIER.)

THE frequency of the kyphotic pelvis is not great. Klien[2] estimates that it is present once in 6016 labours. The risk to the mother is indicated by Neugebauer's statistics.[3] He collected 196 cases of labour in which kyphotic pelvis was present, occurring in 113 women; of these 113 patients 46 died. It is probable that in a very large proportion of these death was due to sepsis, and the mortality, if calculated from cases occurring in recent years, would doubtless be

[1] A paper on this case was read before the Leeds and West Riding Medico-Chirurgical Society on March 2nd, 1900.

[2] Archiv für Gynäkologie, vol. l., part 1, 1895.

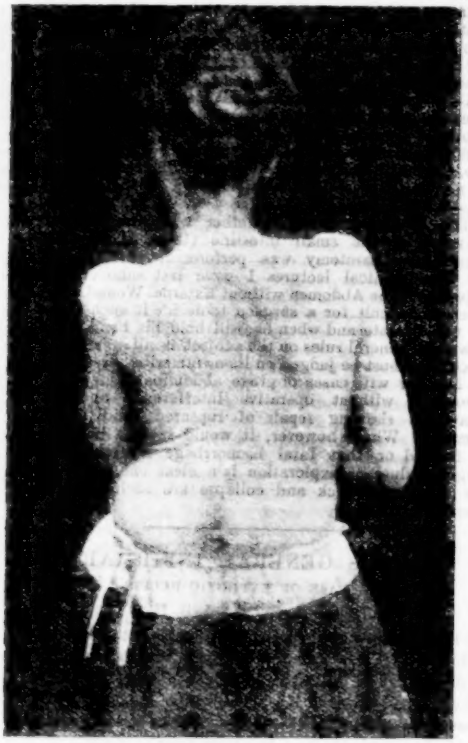
[3] Monatsschrift für Geburtshülfe und Gynäkologie, vol. i., part 4.

much lower, and it has been put at 12 per cent. The mortality of the child is about 40 per cent.

A married woman, aged 43 years, was admitted into the Leeds General Infirmary on Christmas Day, 1899, after having been 24 hours in labour. She had had two confinements about 20 years previously; the first child was a breech presentation and was stillborn, and the second appears to have been delivered by craniotomy. On admission the patient was found to have angular curvature of the spine in the lumbo-sacral region and also lateral curvature. She attributed the spinal curvature to injury from a fall in infancy. She was much exhausted and vomited any food which she tried to take. The uterus was in a condition of tonic spasm, was very prominent, and felt as hard as a large solid myoma. No fœtal heart could be heard and the fœtal parts could not be made out. The patient's expression was anxious and the pulse was 160. On vaginal examination it was found that the head was presenting in the first position, but was firmly impacted against the pelvic outlet. The narrowness of the public arch and the approximation of the ischial spines and tuberosities were very marked. Before admission vigorous but futile efforts had been made to deliver with forceps. After the vulva and perineum had been shaved and disinfected the head was perforated and the child was then delivered without difficulty by means of Barnes's cranioclast. There was no further difficulty with the case and there was no evidence of septic infection and she made an excellent recovery.

After labour the following measurements were taken: distances between the iliac spines and the iliac crests, 9¼ inches and 10 inches respectively; external conjugate

FIG. 1.



Reproduction of photograph of patient with scolio-kyphotic pelvis. Shows lumbo-sacral kyphosis and lateral curve of spine.

diameter, 8¼ inches; oblique conjugate diameter, 5¼ inches; and distances between the ischial tuberosities and the ischial spines, 1¼ inches and 1⅜ inches respectively. The left ischial tuberosity was more prominent than the right and there was evidently some asymmetry in the pelvis, so that the case might perhaps be most correctly described as scolio-kyphotic pelvis. The child was well developed. Illustrations reproduced from photographs of the patient are here given with a diagrammatic sketch of the narrowed pelvic outlet.

FIG. 2.

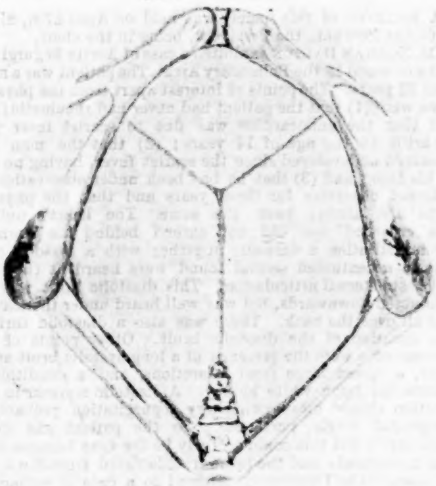
Reproduction of photograph of same patient, showing the lumbo-sacral kyphosis and the somewhat pendulous abdomen. The appearance of the mamma is caused by a belladonna plaster.

Remarks by Dr. HELLIER.—The above example of pelvic contraction is recorded because of its great rarity. With antero posterior contraction of the pelvic brim we are familiar, but transverse contraction of the pelvic outlet is very rarely seen by English practitioners. In 1895 I reported a sporadic case of osteomalacia[4] occurring in Leeds in which the whole pelvis was compressed, but I have not heard of a case of kyphotic pelvis in this district. Kyphotic pelvis is readily recognised: the head enters the brim easily, the conjugate diameter being augmented; it descends into the pelvis without much trouble, but it then becomes impacted on the pelvic floor against the ischial spines and tuberosities. This particular deformity is associated with, and is the consequence of, angular curvature of the spine, as in the case here given. At first sight the connexion between angular curvature of the spine and transverse contraction of the pelvic outlet is not obvious, but the subject was well worked out by Breisky in 1895.[5] The kyphosis of the spine must occur early in life and must be low down, and the deformity of the pelvis is then produced by the alteration in the direction of the forces acting upon the pelvis during the early years of development. The angular curvature throws the centre of gravity forwards. If the curvature were at the upper part of the spine a compensatory lordosis would occur in the lumbar region, but as the curvature is in the lumbo-sacral region compensation can only be obtained by the pelvis being

4 THE LANCET, March 30th, 1895, p. 807.
5 Winckel: Lehrbuch der Geburtshülfe, zweite Auflage, S. 443.

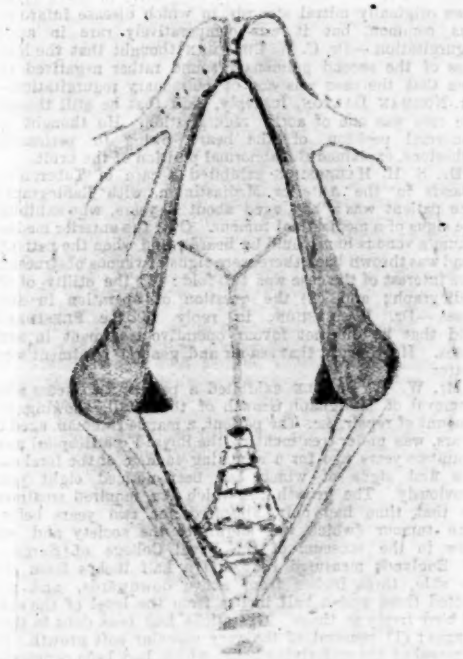
tilted into a more horizontal position. In the normal individual the sacral promontory tends to sink downwards and forwards and there is a physiological flattening of the pelvis seen as the infant grows to maturity, and in rickety and yielding pelves the flattening becomes pathological.

FIG. 3.



Diagrammatic sketch of head presenting at outlet of normal pelvis.

FIG. 4.



Diagrammatic sketch of the contracted outlet of kyphotic pelvis, with impaction of head against ischial spines.

But in the kyphotic pelvis the resultant forces act in the other way. The sacrum is pressed backwards, the coccyx is tilted forwards, and the conjugate diameter at the brim is increased. Also, there is a rotation of the innominate bones. These are so rotated that while the transverse diameter of the brim may be increased, the ischial tuberosities are approximated, the ischial spines come near together, and the pubic arch is narrowed, and there may be obvious rostration at the pubes. The pressure of the femora on the acetabula in this abnormal position of the pelvis helps to compress the pelvis transversely. These points are well illustrated in the case now described.

As regards treatment in the above case the use of forceps was contra-indicated by the extreme contraction of the outlet. Symphysiotomy was also out of the question and Cæsarean section was contra-indicated by the existence of impaction of the head, by the tonic spasm of the uterus and the exhausted condition of the patient, and by the history of an indefinite amount of instrumental interference. The treatment indicated was obviously craniotomy, and this at the outlet of the pelvis is a much easier and safer measure than craniotomy at the brim.

PRINCE ALFRED HOSPITAL, SYDNEY.

A CASE OF STRANGULATED INGUINAL HERNIA IN AN INFANT, AGED 14 DAYS.

(Under the care of Dr. CHARLES MACLAURIN.)

THE occurrence of strangulated inguinal hernia in very young children is extremely rare, in spite of the fact that congenital inguinal hernia is very common. The explanation of the rarity of strangulation in these young subjects is to be found in the softness at this early age of the structures at the neck of the sac. For the relief of these cases when seen early a very useful method is to place the child on his back, with the pelvis raised high on a pillow so that the blood may return from the hernia. Mr. Edmund Owen[1] mentions a case in which he suspended the child by the feet, "the top of his head just resting on the bed. The bowel had been strangulated for many hours, during which time he had been constantly vomiting. The boy slept comfortably in this inverted position and the bowel quickly went back."

A male infant, aged 14 days, had a congenital right inguinal hernia. When he was seven days old he was circumcised (not by Dr. MacLaurin) and unavailing efforts were made to retain the rupture by a wool-skein in the usually accepted manner. On Nov. 27th of last year the hernia came down and became irreducible, apparently causing abdominal pain. The child passed three motions that day. On the 28th he became much worse and the mother took him to the Prince Alfred Hospital, where he was admitted after a few moments' attempt at reduction by taxis, no impression having been made upon the tumour.

When Dr. MacLaurin saw the child on the same afternoon the hernia had been irreducible for 36 hours. It appeared as a tense, shining, œdematous mass of the size of a duck's egg; it was fluctuating, very tender, and occupied and greatly distended the right side of the scrotum and was without impulse on crying. There had been no motion for nearly 24 hours and there was no vomiting, but there was considerable distension of the abdomen. Under chloroform a brief attempt at taxis failed. Dr. MacLaurin therefore cut down on the external oblique, exposing the external ring and a thin layer like tissue-paper which represented the sac and its coverings. It is interesting to note that the cremasteric fibres though spread out were well developed even at that early age. On nicking the sac with the knife-point about half an ounce of serum escaped. Dr. MacLaurin then slit up the sac and the external oblique together as far as the internal ring (the patient's condition did not admit of any more exact differentiation of parts), thus exposing the whole inguinal canal, in order to get room for the manipulation of the tiny structures concerned. The sac contained about four or five inches of small intestine, probably ileum; had it been jejunum there would doubtless have been early vomiting. This was distended, red, congested, showing numerous dilated venules and devoid of peristaltic movement. Some mesentery was in the sac and showed a similar congestion. The intestine

[1] Surgical Diseases of Children, 1897, Third edition, p. 353.

could neither be pulled out nor passed in. There were several flakes of lymph on its surface.

The internal ring, which was the compressing agent, was remarkably firm for a child of the age of the patient and appeared to be a thin, tight band of fibrous consistence. The conjoined tendon, in fact, was better marked than it is in many adults. It was necessary to nick the ring in two places, firstly externally and then above, before the intestines could be returned. It was then closed with two formalised catgut sutures and the slit in the external oblique was stitched up with a running suture of the same material. The sac was left *in situ*, as owing to the child's bad condition it seemed inadvisable to prolong the operation beyond what was necessary for saving life.

As soon as the child's reflexes had returned a tea-spoonful of castor oil was given, which operated in less than 12 hours. On the next day the temperature was 103° F. and the wound looked a little red, so Dr. MacLaurin cut some of the skin-sutures without removing them. A little thin serum escaped and the temperature then fell to normal, the wound uniting without further trouble. The stitches were removed on the tenth day.

Remarks by Dr. MACLAURIN.—Possibly a recurrence will take place, but there is fair reason to hope that if so the use of a truss will cure this case, as it has cured so many in early infancy. So far, I believe, there has been no sign of recurrence. The noteworthy features appear to be as follows.

1. The failure of circumcision to prevent a grave relapse of the hernia. This is in accordance with my former experience, that, as a general rule, circumcision has little or no curative effect upon a rupture.

2. The failure of the "wool-truss." Here again this tallies entirely with my personal experience. The wool-truss I have found difficult to apply, dirty, and often ineffective; while on the score of expense it is in the long run not much preferable even to the series of vulcanite trusses which a growing child requires. A well-fitting vulcanite truss can be worn day and night for a long time and gives no anxiety once the skin under it is toughened. In most cases it will cure the hernia if applied before the age of three or four years.

3. The remarkable strength and well-defined condition of the conjoined tendon and borders of the internal ring generally. Personally I have never seen them so well developed in so young a child. It seems remarkable that if the internal ring closes when the internal oblique contracts a child with such well-defined arcuate fibres and conjoined tendon should have had a hernia; but, granted a hernia, this development appears to explain the strangulation. The hernia descended and became nipped somehow; the gut above became partially paralysed, permitting bacteria to enter the peritoneum through the intestinal walls, and peritonitis began, causing the usual reflex contraction of the abdominal muscles; this nipped the descended hernia still more tightly between the conjoined tendon and Poupart's ligament, and caused absolute strangulation. On the restoration of the intestinal activity the bacteria in the peritoneum—only the advanced guard, as it were, of the invading army—were killed by that membrane and the child recovered.

4. The early age at which strangulation occurred. I connect this with the unusual development of the conjoined tendon, as explained above. There does not appear to be any recorded instance of strangulation at such an early age. I understand that Dr. A. MacCormick of Sydney has operated on a somewhat similar case in very early infancy, but I can find no record of any other instance, at least with regard to inguinal hernia. Mr. G. A. Wright of Manchester had a case in which the age of the patient was three weeks, and Haslewood had one at the same age.[3] Strangulated umbilical hernia at birth is much less uncommon; it is, of course, occasionally caused by the midwife's thread.

[3] Ashby and Wright: Diseases of Children, p. 158.

BRISTOL MEDICAL DRAMATIC CLUB.—The members of the Bristol Medical Dramatic Club celebrated their twenty-third anniversary by the production, at All Saints' Hall, Clifton, on April 24th, 25th, 26th, 27th, and 28th, of Mr. J. M. Barrie's comedy *The Professor's Love Story*. The piece was well acted and there was a large audience each evening. It is hoped that there will be a substantial sum to be divided between the Royal Infirmary and the General Hospital.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

Exhibition of Cases.

A MEETING of this society was held on April 27th, Sir R. DOUGLAS POWELL, the President, being in the chair.

Dr. NORMAN DALTON exhibited a case of Aortic Regurgitant Murmur heard in the Pulmonary Area. The patient was a man, aged 26 years. The points of interest apart from the physical signs were (1) that the patient had never had rheumatic fever and that the endocarditis was due to scarlet fever with nephritis at the age of 14 years; (2) that the man had remained undeveloped since the scarlet fever, having no hair on his face; and (3) that he had been under observation by different observers for three years and that the physical signs had always been the same. The heart's dulness was enlarged but did not extend behind the sternum. On auscultation a diastolic together with a systolic bruit and an accentuated second sound were heard at the third left costo-sternal articulation. This diastolic bruit was not conducted downwards, but was well heard under the clavicle and all over the back. There was also a diastolic thrill in the situation of the diastolic bruit. Other points of less consequence were the presence of a long systolic bruit at the apex, a spleen large from infarctions, and a condition of contracted large white kidney. A diastolic murmur in that position should mean pulmonary regurgitation, probably of congenital origin, particularly as the patient was so ill-developed; but this could scarcely be the case because there was no cyanosis and the heart trouble dated from the age of 14 years.—The PRESIDENT referred to a case of pulmonary regurgitation which had been brought before the Clinical Society of London some years ago. He had seen several cases of pulmonary regurgitation, all of which had arisen secondarily to mitral stenosis. In regard to the case before the society he would like to ask if the diastolic murmur had come on subsequently to mitral disease or not. The splenic infarction in this case was very suggestive of there having been originally mitral stenosis, in which disease infarction was common, but it was comparatively rare in aortic regurgitation.—Dr. C. W. CHAPMAN thought that the loudness of the second pulmonary sound rather negatived the idea that the case was one of pulmonary regurgitation.—Dr. NORMAN DALTON, in reply, said that he still thought the case was one of aortic regurgitation. He thought the abnormal position of the heart, owing to pericardial adhesions, explained the abnormal position of the bruit.

Dr. S. H. HABERSHON exhibited a case of Tuberculous Glands in the Anterior Mediastinum, with Radiographs. The patient was a boy, aged about 14 years, who exhibited the signs of a mediastinal tumour. Over the anterior mediastinum a venous hum could be heard; and when the patient's head was thrown back there were signs of venous obstruction. The interest of the case was two-fold: (1) the utility of the radiograph; and (2) the question of operation in such cases.—Dr. HABERSHON, in reply to the PRESIDENT, said that he did not favour operative treatment in such cases. He thought that sea air and general treatment were better.

Mr. W. H. BATTLE exhibited a patient two years after Removal of Malignant Growth of the Skull, showing the amount of repair, &c. The patient, a married woman, aged 37 years, was under treatment at the Royal Free Hospital more than two years ago for a recurring tumour of the forehead, the first signs of which had been noticed eight years previously. The growth for which she required treatment at that time had only appeared for two years before. The tumour (which was shown to the society and was now in the museum of the Royal College of Surgeons of England) measured four and a half inches from side to side, three inches from above downwards, and projected three and a half inches from the level of the skin. It bled freely at times. Operations had been done in three stages: (1) removal of the very vascular soft growth; (2) removal of the underlying bone, which had been penetrated by the tumour at one point and at other points eaten away; and (3) grafting of the dura mater when it had become covered with granulations. Microscopically the growth was a spheroidal-celled carcinoma. The operation scar was firm,

without any bone in it. She was in good health and six weeks ago gave birth to another child.

Dr. HARRY CAMPBELL exhibited a case allied to Recklinghausen's Disease. The patient was 15 years of age and six years ago was admitted into a home with angular curvature. Two years ago the paraplegia had come on; the legs were now rigid with excessive myotatic irritability. The glands in the axillæ and supra-clavicular regions were enlarged. In certain regions, but especially in the right humeral region, the right posterior thorax, and to a less extent the left humeral region, were nodular masses apparently consisting of hypertrophied subcutaneous tissue somewhat tender to the touch. The skin was very loose where the nodular masses were most pronounced. The skin over the right forearm also was very loose and here there was some subcutaneous hypertrophy. The skin was pigmented, the pigment appearing in patches varying from light yellow to dark brown and in size from a pin-point to several square inches. It was most marked over the subcutaneous masses, the colour being deepest where the masses were thickest. Since admission the disease had steadily advanced. The right hand was congenitally deformed. The third and fourth fingers and their metacarpal bones were fairly normal but the remaining phalanges and metacarpal bones were remarkably mobile, as though their several joints were devoid of ligaments. The patient was perfectly intelligent. The three symptoms of Recklinghausen's disease were thus presented—viz., pigmentation, multiple neuromata, and molluscum masses.—The PRESIDENT thought there were serious objections to calling a disease by the name of an individual and asked if it were not possible to avoid this.—Dr. H. D. ROLLESTON remarked that it would be very difficult to find an alternative name which would indicate the divers features of this disease. Such a name would certainly be more cumbersome. Dr. Campbell's case showed some of the features of Recklinghausen's disease. These cases were very interesting. They were probably due to some congenital aberration of the mesoblast, and especially of that part of it which came in contact with the epiblast, as shown by the pigmentation, neuro-fibromata, and molluscum lesions. The mesoblastic defects were again evidenced by the tendency to the development of sarcoma, and the case which he had recorded had died from this disease.—Mr. CLEMENT LUCAS referred to a case under his care of a young woman, about 26 years of age, who had been suffering from a pigmented mass of skin hanging from the buttock. This he had removed and found that the structure consisted of fibrous growths in the superficial layers of the areolar tissue, with large veins running through them. He had also seen similar cases.—Mr. W. H. BATTLE referred to a case having some of the features of Dr. Campbell's case in which the patient presented a large mass like molluscum fibrosum extending from hip to knee-joint. This patient also had several swellings like the one before the society.—Dr. CAMPBELL, in reply, thought the suggestion of the disease being a developmental error was a very probable one and was supported by the curious malformation presented by the hands. The suggestion of operation needed very careful consideration.

Dr. H. A. LEDIARD exhibited a case of Successful Excision of a Subclavian Aneurysm on Jan. 21st. Ligature of the first part of the subclavian had been done on April 14th, 1899, without benefit. The first part of the axillary was also tied on August 4th without result. The arm became useless and painful, so that interference was imperative. Two and a quarter inches of the collar-bone were removed prior to the excision of the aneurysm and the operation only lasted three-quarters of an hour. Recovery of the arm was almost immediate and the wound healed without trouble. The aneurysm was as large as a hen's egg and the under surface of the clavicle was somewhat worn from pressure.

Sir HUGH BEEVOR exhibited a case of Diffuse Lipomata of the Limbs. The patient was a woman, about 45 years of age, and the leading feature of the case was the enormous size of the legs owing to the fatty deposit.—In reply to the PRESIDENT as to whether any treatment had been adopted he said that in view of the apparent atrophy in the region of the thyroid gland in this patient he had tried the administration of thyroid extract, 15 grains a day for two weeks. No bad symptoms had arisen and already there was a slight diminution in size of the limbs.

Dr. NORMAN DALTON exhibited a case of a boy, aged 12 years, with (apparently) Tuberculous Mediastinal Glands pressing on the Right Lung. He had a tuberculous aspect and well-marked remittent fever. The physical signs of importance were dulness over the upper half of the sternum and over the adjacent portion of the right lung. The veins over the front of the chest were dilated and when the head was retracted the veins in the neck stood out prominently. There was a rather large gland in the left axilla and the superficial epigastric veins were a little large, but nothing could be felt in the abdomen. The tuberculous family history was not positive, and in the last fortnight the physical signs had increased almost too rapidly for tuberculous glands, so that, while it was still most likely that the mass was tuberculous, it was not quite certain that it was so, for sarcomatous or lymph-adenomatous growths extending from the mediastinum into the lung by the side of the bronchi would produce the same physical signs.—Dr. H. A. CALEY questioned whether the mediastinal growth was tuberculous. It seemed to him quite as probable that it was lymph-adenomatous and this was quite as consistent with the temperature.—Dr. A. WHITFIELD suggested that an examination of the blood would probably throw considerable light upon the case. He agreed with the last speaker, and if leucocytosis were present it would confirm the diagnosis of lymph-adenoma. As far as his experience went tuberculous lesions were not attended by leucocytosis.—Dr. HABERSHON thought that a radiograph would aid considerably in the diagnosis of the case. Part of the dulness he believed was due to condensation of the lung. He also inclined to the view of lymph-adenoma and thought that some of the dulness was due to the extension of this growth along the bronchus into the lung.—Dr. NORMAN DALTON, in reply, remarked that he had in mind the possibility of lymph-adenoma and that view was favoured by the rapid growth of the mediastinal lesion. The family history had at first misled him.

Dr. T. D. SAVILL exhibited a case of Macular Leprosy improving under chaulmougra oil. The patient was an intelligent lad, aged 14 years, born in Demerara. He had left that place and come to England at the age of 11 years. The disease began when he was 10 years of age, with erythematous and pigmented patches slightly raised, scattered in different parts of the body, for the most part symmetrically. The patient said that he had been unable to feel in most of these patches, and he had had other places where there was no pigment or erythema which were also without feeling. The patient presented the appearance of a half-caste. At the present time there were scattered over the arms and legs a series of ovoid, slightly pigmented areæ. These areæ were quite flat and presented no alteration in texture at the present time; and in many of them the pigment had almost disappeared. Both the ulnar nerves (but especially the left) were thickened; they had previously been more so. The chief interest of the case lay in the administration of chaulmougra oil. The patient had taken this remedy for nearly a year in gradually increasing doses, beginning with 12 drops daily until now he was taking 100 capsules, each containing four minims of the oil, 400 minims per diem. The swelling and erythema had entirely gone and the pigment was fast disappearing. No anæsthesia could anywhere be made out. These immense doses of the remedy did not upset either the digestion or the general health of the patient.

Mr. CHARTERS SYMONDS exhibited a patient, aged 47 years, from whom he had Removed the Entire Clavicle in February, 1899. The patient was a carpenter and all the movements of the arm were perfect. The growth proved to be a spindle-celled sarcoma.

Dr. PERCY KIDD exhibited a case of New Growth of the Base of the Skull with Unilateral Paralysis of the Cranial Nerves. Practically all the cranial nerves on one side had been affected excepting the vagus and spinal accessory. This patient had optic neuritis on one side only—a feature usual in such cases which had been pointed out by Dr. H. C. Bastian.

Dr. STCLAIR THOMSON exhibited the case of a man with One-sided Paralysis of the Soft Palate, probably diphtheritic in origin. This symptom was a rare one and when present was usually associated with paralysis of the vocal cord of the same side, as the nerve-supply of the levator palati and some of the muscles which close the glottis were derived from the same nucleus; but in this case there was no paralysis of the larynx. Six weeks ago the patient had had what he called a "quinsy, which burst," but it was probably diphtheritic and the lesion a peripheral neuritis.

Mr. J. HUTCHINSON, jun., exhibited a case of Aneurysm

of the Subclavian Artery occurring in a man, aged 47 years. The patient had had syphilis 15 years ago, imperfectly treated. 18 months ago he noticed pain on the left side of the neck on turning his head, then a throbbing swelling appeared over the collar-bone on the left side. He was treated by a medical man for 18 months with iodide of potassium up to 40 or 50 grains daily without much effect. He presented all the signs of aneurysm of the subclavian. The circumference of the arm on the left side was two inches more than that on the right and clubbing of the fingers was marked in the left hand. Mr. Hutchinson asked the opinion of members as to operation. A skiagram showed dilatation of the heart.—Mr. CHARTERS J. SYMONDS remarked that the difficulty of the case lay in ascertaining the condition of the artery behind the aneurysm. He thought it was possible to do something for these cases and he had recently had to perform a very extensive operation in that region which involved the tying of all the arteries and veins. He would suggest that part of the sternum as well as the clavicle should be removed.—Mr. STANLEY BOYD thought it was possible to attack a case of that kind by resecting the clavicle and part of the sternum and then steering inside the carotid. In this way the thoracic duct might be avoided. But in this patient the dilated heart, as shown by the skiagram, and his general condition were contra-indications to any serious operation and unless the aneurysm were advancing he would hesitate to interfere. Such lesions occasionally underwent spontaneous cure or at any rate became stationary.—Mr. HUTCHINSON, in reply, quite agreed that an extensive operation in such a subject was not to be lightly undertaken. The patient was quite willing, but he would hesitate, unless there were strong indications, to assume such responsibility.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF MEDICINE.

Chorea.—Croup.—Pemphigus and Erythema.

A MEETING of this section was held on April 6th, Dr. J. W. MOORE, the President, being in the chair.

Mr. CONOLLY NORMAN showed a case of Chorea, apparently associated with Trauma and complicated with Melancholia.—Mr. CROLY, Dr. DOYLE, Dr. TRAVERS SMITH, Dr. PARSONS, Mr. LANGFORD SYMES, and Dr. J. KNOTT discussed the case.

Mr. LANGFORD SYMES read a paper on the Clinical Significance of the Various Diseases embraced by the term "Croup." He said that there were five chief croupy symptoms: (1) laryngeal stridor; (2) cough, with a barking, "croupy" sound; (3) night attacks; (4) restlessness; and (5) recession of the chest. These were the symptoms popularly called croup. Three main species of disease must be clearly differentiated: (1) diphtheria (of which there appeared to be several varieties): (2) laryngitis, including (*a*) acute laryngitis and (*b*) laryngitis stridulosa; and (3) laryngismus. Laryngismus was an entirely different condition from the other two and should not be included in the term, for it did not produce true croupy symptoms. It was mentioned for the purpose of elimination and distinction. True croup was diphtheria, and most deaths registered as croup were really diphtheria.—Dr. DRURY asked what class Mr. Symes would put those cases under in which they had laryngitis closely resembling what they used to call croup and which they met with in measles. He saw an enormous number of such laryngitis cases in the last epidemic, and such a number of tracheotomies had to be performed that almost all the tracheotomy tubes to be obtained in Dublin were used up. At one time there were from 25 to 30 cases all with tubes in, but they were not diphtheritic cases, nor were they laryngismus stridulus, and most of them recovered.—Dr. DOYLE recommended the use of sulphate of copper in croup.—Dr. PARSONS said that from his point of view diphtheria was an inflammation produced by the Klebs-Loeffler bacillus, and it did not make any difference whether the inflammation was catarrhal, croupous, or diphtheritic. Some other name would then have to be found for those cases of inflammation of the throat produced by other micro organisms.—Dr. TRAVERS SMITH said that the dyspnœa of diphtheria was not a night symptom, whereas that of laryngismus stridulus was essentially a night symptom.

Dr. H. C. DRURY described the case of a boy, aged 14 years, who was under his care in St. Patrick Dun's Hospital suffering from a severe attack of acute pemphigus with concurrent erythema. The erythema was of the "iris" form and was very extensive over all parts of the trunk and extremities. Many circles, becoming confluent, formed very large irregular patches. The pemphigus was also very extensive and was found on all parts of the body, the conjunctivæ escaping. The bullæ varied in size from that of a hempseed to large irregular bags of fluid more than three inches by two inches. Into many of these hæmorrhage occurred. They occupied the site of the erythema but were not so extensive. A febrile disturbance appeared early and increased regularly till the tenth day, then it gradually subsided till the normal temperature was reached on the eighteenth day. During this period the patient was in a very critical condition, and from the position and extent of the bullæ their rupture and ulceration was inevitable, causing considerable suffering. He made a satisfactory recovery. He was given the acid solution of arsenic in gradually increased doses up to seven and a half minims three times a day with iron.

EPIDEMIOLOGICAL SOCIETY.—A meeting of this society was held on April 20th, Dr. Franklin Parsons, the President, being in the chair.—Dr. E. W. Goodall, Medical Superintendent of the Eastern Hospital of the Metropolitan Asylums Board, opened a discussion on the Infectivity of Enteric Fever and remarked that while all were agreed as to its being an infectious disease in the widest sense of the word, the all but universal belief had hitherto been that it was very rarely communicated directly from the sick to the healthy, but that the fever was in almost every instance contracted by the ingestion of water or some article of food or drink contaminated by the alvine discharges of persons already suffering from the disease, corroborating his statement by quoting passages from the works of Fagge, F. Taylor, Dreschfeld, and others, Fagge and Taylor having expressed their belief that the instances of direct infection adduced by Budd, Jenner, and Collie were capable of other explanation. Yet soon after enteric fever had been distinguished from typhus fever Bretonneau, Trousseau, Budd, Watson, and others, and more recently Collie, had maintained its direct infectivity. The denial of this mode of communication for so many years was traceable to the influence of Murchison who, in accordance with his hypothesis of its "pythogenic" nature, further alleged that the evacuations themselves were innocuous until they had undergone putrefaction. Dr. W. Cayley gave his assent to this view, though, as Dr. Alex. Collie observed, typhoid stools were already putrescent when passed. Of late years, however, there had been a decided reaction and a growing conviction among medical officers of health and those in charge of fever hospitals that it was more frequently communicated directly from the sick to the healthy than was commonly supposed, and in support of this contention he quoted from reports by Dr. A. Collie, late of the Eastern Hospital, Dr. J. Priestley, medical officer of health of Lambeth, Dr. L. T. F. Bryett, medical officer of health of Shoreditch, Dr. P. Boobbyer, medical officer of health of Nottingham, Mr. J. W. K. Mullen of Salford Fever Hospital, and others, numerous and indisputable instances of the propagation of the disease among the members of a family or the inmates of the same house, and of nurses, ward servants, and laundry maids in hospitals whose duties brought them in contact with enteric fever patients or their linen, as well as by an analysis of the incidence of the several fevers on the nurses and resident staff of the hospitals of the Asylums Board, which showed a far greater liability to enteric than to any other of the fevers treated in these institutions. The suggestion of Dr. Cayley and Mr. Shirley Murphy that the cause of outbreaks of enteric fever of this kind was to be ascribed to defective drains and insanitary conditions was refuted by the reflection that in that case the disease would not have been confined to the nurses, &c., but would have attacked some at any rate of the other patients. The fact that for many years cases of enteric fever had been admitted with impunity to the wards of every general hospital was often urged as an argument against its infectivity, but no one doubted the infectious character of typhus fever and yet as Dr. J. S. Bristowe and Mr. T. Holmes,

in their well known report on hospitals, pointed out, the spread of this fever even to the occupants of adjacent beds was almost unknown, and cases had been admitted to St. George's Hospital and St. Thomas's Hospital (at the latter 30 in 15 months) without any other patients contracting it. Personally he had no doubt that the direct communication of enteric fever was far more easy than was commonly believed, the infection—i.e., the bacilli—being present in the excreta and, as a striking instance reported by Petruschky showed, in the urine which was highly infective; that this did not occur more often in hospitals was due to the greater care taken in the removal of the excreta and soiled linen, but in the absence of these precautions as in the dwellings of the poor the infection was frequently conveyed by these means, by soiled fingers, and, perhaps, diffused in a dry state, was inhaled in the form of dust, though there was no evidence of the infectivity of the breath or exhalations from the skin.—Dr. F. F. Caiger (South-Western Fever Hospital) thought that Dr. Goodall underrated the general recognition of the infectivity of enteric fever. In his hospital in nine years 23 of the nurses attending cases of enteric fever had contracted the disease and three had died, though only one in 15 of the nursing staff was thus employed. In the same period but one patient had been attacked, though 20 per cent. of the admissions to the enteric fever wards were not cases of typhoid fever at all. Nurses usually contracted it in times of greatest pressure, but no ward servant or laundry maid had ever been attacked, and he ascribed their exemption to the strictness of the precautions enforced, especially the removal of soiled linen in closed pails, no possible vehicle of infection being touched by anyone but the nurses who were educated in the practice of the most scrupulous cleanliness; indeed, no disinfectants were used lest reliance should be placed on them instead. He had no doubt as to the infectivity of the urine being at least as important as that of the fæces, though not recognised as it should be. The incubation period of enteric fever might be much less than 12 days in proof of which he referred to a report in THE LANCET a year or two ago of two bodies of Austrian troops on the march. Passing through a village where enteric fever was raging one detachment drank freely of the well while the other did not. None of the latter were attacked, but every one of the former developed the fever within a fortnight, most within the week, and some as early as the third day.—Dr. E. F. Willoughby thought that after all there was no real difference of opinion, for no one believed in distant aerial diffusion, as of small-pox or measles, and all agreed as to the infectivity of the excreta and urine. The mode of direct communication of the infection from the sick to the healthy was almost always what he called "eating with unwashed hands," just as the painter contracted lead poisoning, and in the direct as well as the indirect means of communication enteric fever and cholera were alike. Every instance adduced by Dr. Goodall was capable of being thus accounted for, and Dr. Caiger's experience furnished the strongest confirmation of the conveyance of the infection by the hands. It was only in hospitals where the nurses were overworked and in the cramped rooms of the poor that such infection was observed. It was never met with in the houses of the well-to-do, where every precaution could be enforced. In all his experience he had met with but one instance of direct personal infection among persons in comfortable circumstances, that of a patient who kept to his business throughout in spite of exhaustive diarrhœa, the nature of which he never suspected until his young wife who had washed his frequently soiled linen was attacked with typical and, in the end, fatal enteric fever. With regard to the exceptionally short incubation in the cases referred to by Dr. Caiger, it was in that communication pointed out that the fatigue of a long march, without food, in very hot weather, had rendered the men specially susceptible, though the subsequent fever was of the mildest type.—Colonel J. L. Notter, R.A.M.C., was convinced that the infection was always eaten or drunk and that when the water was not the vehicle it was conveyed to the mouth by dirty hands. He did not believe in the infectivity of breath or sweat. In the army, except in war, orderlies and nurses were scarcely ever attacked. One case he knew of a lady nurse who, otherwise very careful, seemed to have contracted it through tasting a cup from which a patient had drunk.—Dr. H. T. Bulstrode maintained that medical officers of health fully recognised its infectivity. There might have been a change of type, but the greater susceptibility of the nurses in the hospitals of the Metropolitan Asylums Board than of those in the London Fever Hospital was doubtless due to their much younger age. Considering the mode of infection it was easy to understand the great danger incident to nursing cases of this fever, and it was probable that ere long they would not be admitted into general hospitals. Dr. A. Hill of Birmingham had traced direct infection in 50 out of 200 cases admitted to the fever hospital there.—Several other members of the society took part in the discussion which it was agreed should be printed in the Transactions.

LIVERPOOL MEDICAL INSTITUTION.—The fifteenth ordinary meeting of this society was held on April 26th, the President, Mr. Edgar Browne, being in the chair.—Mr. J. Bark showed a man, aged 30 years, with Cysts in the Glosso-epiglottic Fossa. The largest, having a diameter of a quarter of an inch, was a yellowish-white globular swelling on the right of the glosso-epiglottic frænum, and there were two others on either side of the frænum of about the size of a split pea. The symptoms produced were excessive secretion of saliva with a constant desire to swallow, which produced a sensation of a lump at the back of the tongue. Mr. Bark proposed to remove them by means of laryngeal punch forceps.—Mr. F. C. Larkin read notes of a case of Fracture involving the Anterior Fossa of the Skull, with Nasal Hydrorrhœa. A young man, aged 20 years, met with a cycle accident which rendered him unconscious for from three to four hours. This was followed by a profuse discharge from the nose, the character of which was cerebro-spinal, and the flow lasted for about six weeks. He was only off work altogether for a few days and complained only of headache and of being bothered by the fluid coming from the nose. After the discharge ceased the headaches continued. Eight weeks later he was seized with symptoms of cerebral meningitis and he died. The post-mortem examination showed considerable fracture of the orbital plates of the frontal and of the ethmoid and that a wide communication existed between the cranial cavity and the nose, the track running by way of the anterior ethmoidal cells and the antrum of Highmore. (The parts implicated, with photographs and sketches, were exhibited).—Dr. J. M. Hunt showed a case of Dysphonia Spastica. The patient was a hysterical male, aged 50 years, who lost his voice suddenly six months ago, without apparent cause and since then he had been either quite aphonic or had spoken in a high falsetto. On attempted phonation the cords were so strongly approximated that the right vocal process crossed over the top of the left. If the patient made an effort to speak during the periods of aphonia his face became livid and the muscles were convulsed. The normal voice could be restored by pressing on the epigastrium but it disappeared immediately on removing the pressure.—Dr. Nathan Raw showed a specimen from a patient who had suffered from Acute Œsophagitis for over six months. After a violent fit of choking he expelled a complete cast of the œsophagus which appeared to consist of the epithelial and mucous lining of the gullet. The specimen was eight and a half inches long and in a perfect state of preservation. The man was recovering, although he still had great pain and difficulty in swallowing.—Dr. Raw also showed a man on whom he had operated for a large Liver Abscess. The patient had been abroad for 20 years and six years ago he had dysentery. He presented all the symptoms typical of the affection with the exception that the exploring needle failed to find the pus. The abdomen was opened in the right Langenbeck's line and the liver was found to be adherent to the costal arch in its upper two thirds. The abdominal wound was closed and an opening was made through the seventh interspace and 32 ounces of chocolate-coloured pus were withdrawn. The patient made a good recovery and was following his employment.—Dr. James Barr read a paper on the So-called Pulsus Paradoxus. He said that he had been working more or less at the pulse for a quarter of a century and he had never been able to find the paradox, though he was well acquainted with the condition of the pulse which became smaller or disappeared during respiration. Since the appearance of Kussmaul's paper and the erroneous interpretation of this phenomenon in 1873 an undue importance had been given to the condition which was merely an exaggeration of a perfectly normal state of the pulse. Anyone having a good respiratory pump and moderately low arterial tension could develop the so-called pulsus paradoxus in himself, and such a one by carrying out the Valsalva method could completely obliterate his pulse at the wrist for several beats.

He looked upon the condition as a decided advantage to the individual both in health and disease, seeing that it was evidence of the integrity of the respiratory pump, which was a great aid in carrying on the circulation.—Dr. John Hay thought that Dr. Barr seemed inclined to magnify the recognised effects of abnormal respiratory efforts on the normal pulse and to minimise the fact that a paradoxical pulse during normally quiet breathing might occasionally be of value in diagnosis. Normal respiration in a normal individual failed to produce that rhythmical and marked variation which was termed "pulsus paradoxus." This variation when pronounced was in his experience always associated with some pathological condition and what was necessary was rather to locate and give proper value to it as a physical sign.—Dr. A. G. Gullan thought that the fact that the pulsus paradoxus as shown by Dr. Barr could be produced artificially by a simple physiological experiment in persons with low pulse tension agreed with those recorded cases where it had been noticed in children while they were asleep and also with the fact that pathologically it was almost always found in pulses of low tension.—Dr. J. H. Abram, Dr. R. J. M. Buchanan, Dr. A. S. F. Grünbaum, and Dr. Lloyd Roberts also took part in the discussion and Dr. Barr replied.

WINDSOR AND DISTRICT MEDICAL SOCIETY.—The annual general meeting of this society was held at the Guildhall, Windsor, on April 25th, Mr. W. B. Holderness, J.P., the President, being in the chair.—The President, on moving the adoption of the annual balance-sheet, called attention to the very satisfactory state of the finances, in consequence of which the society was enabled to give a subscription of two guineas to the Royal Army Medical Corps South Africa Fund.—The annual report, read by Dr. E. B. Hulbert, the honorary secretary, showed that the society had no less than 100 members resident in Windsor and 32 of the neighbouring towns and villages, the names of which were enumerated. Included among its numbers were five members attached to the Household Brigade, four of whom—viz., Surgeon-Major W. C. Beevor, Scots Guards, Captain F. S. Brereton, R.A.M.C., Surgeon-Lieutenant-Colonel J. S. Forrester, Royal Horse Guards, and Captain R. E. G. Phillips, R.A.M.C., together with Deputy Surgeon-General H. Cayley, F.R.C.S. Eng., were now serving in South Africa. The society had incurred no losses by either death or resignation during the session. The total number of meetings held was nine, all of which had been well attended.—The following gentlemen were duly elected officers for the ensuing year:—President: Mr. W. B. Holderness, J.P. Vice-Presidents: Dr. G. E. Barron (Ascot), Mr. J. Brickwell (Slough), Dr. W. D. Moore (Virginia Water), Mr. W. A. U. Thomson (Maidenhead), Mr. T. H. Scutt (Staines), and Mr. J. Startin (Egham). Treasurer: Mr. J. W. Gooch (Windsor). Committee: Dr. A. J. Anderson (Ashford), Dr. J. S. Ferris (Uxbridge), Mr. G. G. Graham Hodgson (Chertsey), Dr. H. T. Newman (Iver), Dr. E. S. Norris (Eton), and Mr. W. Tinker (Virginia Water). Secretaries: Dr. C. R. Elgood and Dr. G. E. Hale. Amongst various sub-committees an Original Investigations Committee was formed consisting of Dr. M. S. Pembrey (Windsor), Dr. A. J. Anderson (Ashford), Mr. E. W. Adams (Slough), Dr. A. Charpentier (Uxbridge), and Mr. W. H. Gossage (Chertsey).—The date of the annual dinner of the society was discussed but not fixed.

FOLKESTONE MEDICAL SOCIETY.—A meeting of this society was held on April 6th.—Mr. W. F. Chambers read a paper on Operative Midwifery. He said that as they got more civilised parturition changed from being a "physiological event" into a "disease," and that in the higher classes operative midwifery was much more frequent than in the lower. The prevention of sepsis should be carried out with even more care than in a surgical operation. A cocaine tablet in a piece of wool wetted and then applied to the cervix had done good in two cases. He sterilised the forceps in a solution of biniodide of mercury. Axis-traction forceps were of assistance and those of Le Page were simple and economical but were liable to slip. External version was impossible in most cases of transverse presentation as the cases were seen too late. He thought the use of a curette directly after delivery or during the lying-in period should be discouraged; the finger-nail was more to be trusted. In ruptured perineum he did not suture unless the tear was severe or unless there was a good nurse in attendance. In his experience the sutures gave way; he tied the legs together and kept the wound clean.

Reviews and Notices of Books.

Encyclopædia Medica. Under the general editorship of CHALMERS WATSON, M.B., M.R.C.P. Edin. Vol. III. Diphtheria to Food. Edinburgh: William Green and Sons. 1900. Pp. 545.

THE third volume of the Encyclopædia Medica contains many interesting articles. The first is by Dr. E. W. Goodall on Diphtheria. Dr. Goodall, being the medical superintendent of the Eastern Hospital of the Metropolitan Asylums Board, London, has had unusual opportunities for the study of this disease and the editor may be congratulated on having secured his services. The contribution consists of an admirable summary of our present knowledge of diphtheria, together with the results of Dr. Goodall's observations. The subject of diagnosis receives considerable attention. The difficulty of distinguishing between early cases of diphtheria and follicular tonsillitis is becoming more and more recognised, and the author recommends that every case of this kind should be regarded with suspicion and should be forthwith isolated and injected with antitoxin. No doubt this plan has much to recommend it, but there are obvious difficulties in carrying it out, and we doubt whether it will ever be generally adopted. The use of bacteriological cultures is of considerable help, but experts in this branch of medical science still admit some difficulty in the recognition of the bacillus, and, further, a single negative result, or even two or more, do not necessarily prove that the disease is not diphtheria. Dr. Goodall speaks in no uncertain terms of the antitoxin treatment and the figures which he quotes are convincing as to its efficacy. We recommend a careful study of these pages to those prominent anti-vivisectionists who quote such misleading statistics as have been recently instanced in our columns. Dr. Goodall's remarks on Intubation and Tracheotomy are also instructive.

A valuable article, especially for purposes of reference, is that on Drug Eruptions, by the late Dr. R. Glasgow Patteson. A full list is given of the types of eruptions which are met with and of the drugs associated with their occurrence, whether used externally or internally; the rashes produced by such drugs as antipyrin, arsenic, belladonna, the bromides, the iodides, mercury, quinine, &c., are considered at length, and the general principles of treatment in connexion with the eruptions are duly considered. The antitoxin rashes are also described. The eruptions due to drugs are described in various text-books, but a practitioner requiring information with regard to any one drug may have to search through several before he discovers what he requires. In Dr. Patteson's article, however, he will find without any difficulty a full description of the cutaneous lesions produced by certain drugs.

Dr. A. Davidson, Lecturer on Tropical Diseases at Edinburgh University, contributes the article on Dysentery. In speaking of the bacteriology of the disease he remarks that in certain cases bacteria alone are met with in the stools and intestinal lesions; in others, amœbæ as well as bacteria are present. The precise significance of the amœbæ in relation to the dysenteric process has not been fully determined, but as they are associated with a form of the disease presenting distinctive clinical and pathological characters Dr. Davidson thinks we are justified in admitting a non-amœbic and an amœbic form of dysentery, and he is further of opinion that the diversities observed

in the clinical features and in the lesions of non-amœbic dysentery, taken together with the results of bacteriological researches, indicate that this form will ultimately be found to comprise two or more distinct varieties. As our knowledge of tropical diseases increases we shall probably find that there are numerous varieties of "tropical diarrhœa" which are not at present recognised, and this discovery may have considerable influence in prophylactic and curative treatment.

Under the heading of "Ear" there are seven articles dealing with the various aspects of the diseases of that organ. Dr. A. Logan Turner writes on Examination of the Ear, Mr. P. M. Yearsley and Dr. W. Jobson Horne on Local Anæsthetics, Dr. Thomas Barr on the External Ear, Dr. P. McBride on the Tympanic Membrane, Dr. R. M. Johnston on Middle-ear Acute Inflammation, Dr. W. Milligan on Chronic Suppuration, and Mr. A. H. Cheatle on Chronic Non-Suppurative Inflammation. These articles form an excellent compendium of our knowledge on diseases of the ear and practitioners will find them of considerable value for purposes of reference.

The article on Eclampsia is by Dr. H. Jellett, late assistant master at the Rotunda Hospital, Dublin. The remarks on the treatment of the condition will be found particularly interesting. Dr. J. Halliday Croom contributes a paper on Ectopic Gestation. The author has spared no pains to make it as complete as possible and we are very favourably impressed with the paragraphs on Diagnosis.

Dr. Leslie Roberts may be congratulated on his article on Eczema. The section on Etiology is most interesting and well repays perusal. He has the courage to oppose the popular notion that eczema is very frequently of gouty origin. He points out that not only is there no proof that the uric acid compounds can directly originate eczema, but that the evidence, so far as it goes, points to the opposite conclusion. But he considers the strongest argument in support of his contention to be the tolerance of the skin for uratic deposits. The formation of tophi in the external ear and in the neighbourhood of the joints is not accompanied or followed by an eczematous eruption. Dr. Roberts cannot deny, of course, that gouty persons are prone to gout, but he is of opinion that it is not the uric acid but the nerves of the gouty man which predispose him to eczema. The description of the various methods of treating eczema is also worthy of high praise.

Dr. T. Kennedy Dalziel writes a useful and complete article on Injuries and Diseases of the Elbow-joint. An interesting and instructive contribution, more from a scientific than from a clinical point of view, is that on Enzymes, by Professor Martin Hahn of the Hygienic Institute of Munich. Dr. J. S. Risien Russell contributes a short article on Equilibrium, and further on in the volume one on Facial Hemiatrophy, Paralysis, and Spasm. Both articles are characterised by evidence of thorough knowledge of the subjects and lucidity of expression.

The methods employed in the Clinical Examination of the Eye are well described by Mr. W. Adams Frost, whilst Mr. A. Hill Griffith has contributed an able article on Injuries of the Eyeballs.

Another contribution which should prove particularly useful to the practitioner is one on Affections of the Eyelids, by Mr. W. Lang. Some of these affections are very common and unless properly treated may lead to serious results.

Dr. G. H. F. Nuttall has been granted ample space for his remarks on Filariasis, with the result that he has produced one of the best essays on the subject which we have met with. The author remarks that "the genus filaria comprises a large number of species," and he describes no less than 36 varieties, a fact which demonstrates the large amount of study which he must have devoted to the preparation of his article.

There are many other articles in this volume which should receive notice, but we have only space to mention them: Electricity, by Dr. Wilfred Harris; Enteroptosis, by Dr. A. L. Gillespie; Epidemiology (an excellent article), by Dr. A. Davidson; Epilepsy and Epileptic Colonies, by Dr. W. Aldren Turner; Erythema, by Dr. A. Whitfield; Examination of Pathological Fluids, report on the Physical and Chemical Examination, by Dr. T. H. Milroy; Bacteriological Examination, by Dr. D. A. Welsh; and Food, by Dr. E. W. Hope.

We can speak in high praise of Volume III. of the Encyclopædia Medica and the editor is to be congratulated on the contributors he has been able to secure.

A Manual of Gynæcological Practice. By Dr. A. DÜHRSSEN. Second English edition. Translated and edited from the Sixth German edition by JOHN W. TAYLOR, F.R.C.S. Eng., and FREDERICK EDGE, M.D. Lond. With 125 Illustrations. London: H. K. Lewis. Pp. xlii. and 279. Crown 8vo. Price 6*s*.

THE fact that Professor Dührssen's book has reached its sixth German edition shows that it has met with a well-deserved success, and the translators have done a good work in providing us with a second English edition. The book presents many points of interest to an English reader and, as we remarked in noticing the first edition, the view which it gives of Professor Dührssen's own practice is of great value. The translators have added an anatomical introduction which furnishes the main facts of the anatomy of the pelvic organs in a clear and concise form. The author has now practised his operation of vaginal cœliotomy in 500 cases with a mortality of 3 per cent. The operation is undoubtedly one of great value in suitable cases, but it is, owing to anatomical considerations, limited to a relatively small sphere and is only applicable to those cases where the cervix can be drawn down to the vulva. The method of opening Douglas's pouch is objected to on account of the frequency with which it is followed by the formation of perimetritic adhesions and the danger of causing laceration of the bladder if forcible retroflexion of the uterus be carried out.

In the treatment of cases of genital atresia with hæmatosalpinx salpingotomy is recommended. Fuld's researches have shown that the simple vaginal operation is attended by a mortality of at least 70 per cent. (39 deaths in 56 cases). As an alternative to amputation of the cervix in cases of chronic metritis Professor Dührssen has devised the method of removing a wedge-shaped piece from the whole anterior cervical wall after opening the anterior vaginal fornix. By this operation a normal slender cervix is obtained which later cicatricial contraction will not alter. The danger of the occurrence of posterior parametritis and perimetritis which so commonly follows the ordinary method of amputation is also avoided.

Vaginal fixation for cases of retroflexion of the uterus requiring surgical treatment is an operation which the author has done much to popularise and he is now able to publish the results of 600 cases treated in this way. Certain modifications have been carried out in the technique of the operation in order to avoid the occurrence of grave disturbances in labour in the event of the patients becoming pregnant. These consist in passing only one fixation thread and in separate suture of the peritoneal opening. The vaginal fornix is laid open by a ⊥ incision and the peritoneum by a sagittal one. The fixation suture is passed through the vaginal wall and peritoneum at the upper end of the peritoneal opening. The peritoneum is closed by a continuous catgut suture, and then the vaginal wound is closed in the ordinary manner. In this way a purely serous adhesion is formed with the fundus, and this stretches readily if pregnancy occurs. In considering the operative treatment

of fibroid tumour of the uterus vaginal cœlio-myomectomy is recommended for small tumours. This aims at preserving the uterus and adnexa, and consists in the extraction of the uterus through the opened anterior vaginal fornix and the removal or enucleation of the myomata according as they are sub-serous or interstitial or sub-mucous. This operation is said by the author to be not more dangerous than curettage. In the treatment of large fibroid tumours supra-vaginal amputation of the uterus is preferred to total extirpation, and in cases of hæmorrhage where operation is contra-indicated Professor Dührssen would try the effect of steam applied to the endometrium, a method of treatment which is often followed by permanent and good results.

The translators have in many instances added to the value of this little work by the addition of notes, and the book is one which all those interested in gynæcological practice should read.

Outlines of the Comparative Physiology and Morphology of Animals. By JOSEPH LE CONTE. New York: Appleton and Co. 1900. Pp. 499. Price 7*s.* 6*d.* net.

THIS work is a fair representation of modern physiological knowledge written intelligently and adapted for the upper classes in schools and as an introduction to the larger works on physiology. There is some failure in the perception of the perspective in the space given to the several subjects. In such an elementary work as this, for example, the consideration of the horopter and the horopteric circle is surely quite out of place, especially when the author concludes the paragraph devoted to them with the remark, "Whether there be such a surface at all, and if there be, what is its form, are very complex and difficult questions which cannot be discussed now." Why, then, trouble the student with it at all? The subject of reproduction is altogether omitted. The chemistry of respiration is very shortly dismissed. In speaking of the course and termination of nerve-fibres the author describes a sensory fibre of the cerebral system as beginning in a sensory cell of the cerebral cortex, passing *down* a posterior column of the cord, there communicating with a sensory cell of a posterior cornu and becoming a sensory fibre of the reflex as well as the cerebral system, and so on, and, having thus impressed on the mind of the student the *descending direction* of the sensory fibres from an anatomical point of view, proceeds in the next paragraph to reverse all this and to show that in a physiological sense the sensory impressions travel in the opposite direction through channels all of which run in an upward direction.

In the section on the Comparative Physiology of Touch the author remarks that in birds the beak is an exquisitely sensitive organ of touch. Sensory nerves, he continues, are abundantly distributed at its base and beneath the horny sheath, exactly as in the case of *our finger-nails*, which are also delicate organs of touch, a statement we can scarcely admit to be accurate. The chapter on Glycogeny is well written and suggestive, and, speaking generally, the functional activities of the several classes of the vertebrata and invertebrata are clearly described. Many of the diagrams are novel and cleverly made.

Outlines of Bacteriology. By Dr. L. H. THOINOT and E. J. MASSELIN. Translated and adapted for English Use with Additions by W. ST. CLAIR SYMMERS, M.B. Aberd. London: Charles Griffin and Co., Limited. 1899. Pp. xi., 318. Price 10*s.* 6*d.*

MOST of the works on bacteriology which are in common use in this country are either of English or American origin or have been translated from German text-books. Yet a vast mass of invaluable work on the subject has emanated from France, notably from the Institut Pasteur, and the French school of bacteriology has many excellent and distinctive features. It is, therefore, with much pleasure that we welcome in English dress the admirable little work of Thoinot and Masselin, which presents as good an epitome of the French school of teaching as could be desired, and constitutes a pleasant departure from the groove into which many of our text-books have got. Not that the facts are at variance with those commonly taught in this country, but they are stated differently and, as it were, in a fresh light, while they are illustrated mainly, though by no means exclusively, from the work of French observers.

The most striking feature of the English edition of the book is its small size. It goes easily into the pocket and is attractively bound in limp morocco. This size has been attained by the use of thin paper and small print and not in any way by undue compression of the subject-matter. Indeed, the information conveyed is singularly full and complete and with a few exceptions the work compares very favourably in this respect with manuals of much larger size. There are, indeed, omissions—for example, there is no proper account of the method of making agar-agar plate cultivations. Nor under the head of the Modes of Cultivating Anaerobes do we find any mention of the extremely useful method of extracting the oxygen from the air by caustic potash and pyrogallic acid in Buchner's tubes. Yet on the whole the methods described are adequate and useful and many of the forms of apparatus will be new to students in this country. All the well-known pathogenic organisms are treated of at considerable length and there are a large number of admirable coloured illustrations of them introduced into the text. The translator has done his work excellently and the book reads as well as if it had been originally written in English. He has also introduced a certain amount of original matter derived from his own experience. We can cordially recommend the book to our readers from many points of view—notably for its accuracy, clearness, novelty, and very convenient size.

Diphtheria. By WILLIAM R. SMITH, M.D., D.Sc., F.R.S. Edin. London: Baillière, Tindall, and Cox. 1900. Price 6*s.* net.

THIS royal octavo volume which consists of 120 pages, together with charts and six coloured maps, contains the three Harben Lectures for 1899. The book is capitally got up.

Briefly stated these lectures may be regarded as Dr. Smith's 1896 report to the London School Board brought up to date. Chapter I. deals with the history and distribution of diphtheria in England, and the behaviour of this disease is contrasted with that of measles and scarlet fever. As the author points out, the facts suggest "that special local causes other than school attendance, or the neighbourhood of infected centres, have a potent influence in selecting the disease and promoting its diffusion." We doubt if any epidemiologist would be likely to quarrel with this inference. It is, however, in Chapter II. in which school influences are discussed that Dr. Smith's readers will probably be most interested, seeing that he holds the extremely responsible position of medical officer to the London School Board. As we read this chapter it is difficult for us altogether to avoid the conclusion that the author hardly grasps sufficiently what we may term the natural history aspect of diphtheria, and that hence he may be quite unconsciously somewhat distorting the true issue. As an instance of our meaning we refer the reader to page 51, where, in discussing certain communications which the author had received from medical officers of health and others upon this interesting subject, he observes "that the majority consider attendance at school to be an unimportant

factor in the spread of the disease ..... and more important still, that closure of schools and abolition of compulsory education would not stamp out the disease." The first part of this statement is both interesting and important, but we regret that some examples are not furnished of the opinions of the minority. Of course, however, there had to be a time limit to the lectures. But it is the latter part of the statement that surprises us. Surely no epidemiologist has ever attributed the origin of diphtheria to schools or supposed that the abolition of compulsory education would "stamp out" the disease. It is, indeed, the use of this term "stamp out" that raises suspicion in our minds as to whether Dr. Smith has not in some degree mistaken the issue. Surely the question in dispute is as to the *amount* of diphtheria to be attributed to schools, not as to whether its very existence is due to them. So, too, in considering the question of holiday influences, Dr. Smith endeavours to arrive at a conclusion by a study of the "all ages" curve, and this notwithstanding the fact that Mr. Shirley Murphy has pointed out how much better it would be to take the *school ages* alone, and that the figures since 1892 are all available. Chapter III. gives an interesting summary of the present position with regard to diphtheria antitoxin, and much use is made of the valuable records of the Metropolitan Asylums Board, while in the Appendix will be found a letter from Dr. Körösy of Budapest as to the question of schools and diphtheria. The lectures, taken as a whole, form a useful and readable summary of much of our knowledge of diphtheria, and this being so, it is, we think, regrettable that the portion relating to school influences should convey to the reader some idea of straining. Certainly the student of the question should read these lectures side by side with Mr. Shirley Murphy's report for 1898 to the London County Council.

Handbook of Physiology. By W. D. HALLIBURTON, M.D. Lond., F.R.S., Professor of Physiology, King's College, London. Sixteenth edition, with upwards of 650 Illustrations, including some coloured plates. London: John Murray. 1900. Pp. 872. Price 14*s*.

THE present edition is not increased in size. We had so recently to notice with commendation the changes introduced by Dr. Halliburton into the well-known Kirkes' Handbook, of which this is the outcome, that we have now little to add. In the preface the author states that the rapid sale of the fifteenth edition has necessitated the issue of another. The present one, he adds, is not a mere reprint, but where necessary the subject-matter has been brought fully up to date. As only a year has elapsed since the last edition was published it was not to be expected that much new material could be added. We have carefully compared the first 500 pages of the two editions and have only found one or two alterations. One of them is in regard to the paradoxical contraction of muscles which may be induced by electrical stimulation after destruction of the spinal cord of the central end and of one of the two branches into which the sciatic divides which depends on electrotonic currents; in the older edition the author observes in a note that the term "paradoxical contraction" used in this sense must be carefully distinguished from the same term as employed by Westphal and adopted by many physicians. Westphal uses it for a slow tonic contraction occurring in a muscle when its attachments are suddenly brought nearer together. This condition is best seen in the tibialis anticus and the contraction may last several minutes. The explanation is not known. In the new edition Dr. Halliburton remarks that the paradoxical contraction must be carefully distinguished from Kühne's gracilis experiment. In the gracilis experiment the nerve fibres themselves branch, and any form of stimulation applied to one branch will cause contraction of both halves of the muscle. In the paradoxical contraction the bundles of nerve fibres are merely bound *side by side* in the sciatic trunk. There is therefore no possibility of conduction of a nerve-impulse in both directions. The stimulus, moreover, must be an electrical one. In another place in the older edition it was stated that the variations of intra-pleural *and intra-pericardiac* pressure may be recorded by the introduction of a cannula into the pleural cavity. In the present edition the words in italics are of course left out. Again, Dr. Halliburton points out that the distinction between organised ferments and enzymes is more apparent than real, for micro-organisms exert their action by the enzymes that they secrete. It may be seen from these changes and additions, and from others dealing with the adrenals, that Dr. Halliburton has fulfilled his purpose of keeping abreast of recent work, and we have only to add that this is one of the best illustrated manuals of physiology which we possess.

JOURNALS.

The Journal of Anatomy and Physiology, Normal and Pathological. Conducted by Sir WILLIAM TURNER, F.R.S., D. J. CUNNINGHAM, F.R.S., G. S. HUNTINGTON, M.D., A. MACALISTER, F.R.S., and J. G. M'KENDRICK, M.D., F.R.S. Vol. XXXIV. New series, Vol. XIV. Part 3, April, 1900. With Plates and Figures in the text. London: Charles Griffin and Co., Limited. Price 6*s*.—The articles contained in this number are the following:—1. Johnson Symington, M.D. Edin., of Belfast, on Separate Acromion Process. Dr. Symington strongly opposes the fracture theory and supports the theory that when separate the separation is due to the non-union of the epiphysis in development. 2. J. Kingston Barton, M.R.C.P. Lond., A Contribution to the Anatomy of the Digestive Tract in Salmo Salar, with four plates, in which the author shows that the stomachs of cod, whiting, and smelt present the same indications of desquamative catarrh that have been observed by Dr. Lovell Gulland in the salmo salar, and which are recorded in the report of the Scotch Fishery Board for 1898. Mr. Barton's observations on the salmon support the statements of Dr. Gulland and also those of Dr. Noel Paton on the diminution of the digestive power of the gastric juice during the period of catarrh. 3. F. G. Parsons, F.R.C.S. Eng., The Joints of Mammals compared with those of Man: the joints of the hind limb—a portion of the course of lectures delivered this year at the Royal College of Surgeons of England. 4. Albert A. Gray, M.D. Glasg., F.R.S. Edin., On a Modification of the Helmholtz Theory of Hearing. 5. W. Myers, M.B. Cantab., On the Causes of the Shape of Non-nucleated Red Blood Corpuscles. Dr. Myers advances an hypothesis to the effect that the biconcave form of the corpuscle represents an early stage of dehydration of a disc which contained more water, the dehydration being occasioned by the plasma. 6. N. Bishop Harman, B.A., M.B. Cantab., The Anterior Limit of the Cervico-Thoracic Visceral Efferent Nerves in Man, with six plates. A short article, but one which contains the results of much work. 7. William H. Wynn, B.Sc. Lond., On the Minute Structure of the Medullary Sheath of Nerve Fibres with two plates. 8. Thomas W. Shore, M.D. Lond., An Unusual Arrangement of the Renal Portal Vein in the Frog. 9. R. Tait M'Kenzie, M.D., Demonstrator of Anatomy McGill University, Montreal, Notes on the Dissection of Two Club Feet. 10. Bertram C. A. Windle, M.D. Dub., F.R.S., Tenth Report on Recent Teratological Literature. 11. C. M. Cooper, M.B. Edin., A Pericardial Sac in which the Large Azygos Vein pierced the Sac before opening into the Superior Vena Cava. The part also contains the Proceedings of the Anatomical Society of Great Britain and Ireland.

Analytical Records
FROM
THE LANCET LABORATORY.

SOLOIDS OF PROTARGOL.

(BURROUGHS WELLCOME AND CO., SNOW HILL-BUILDINGS, LONDON, E.C.

PROTARGOL was first brought to the notice of our readers as a substitute for nitrate of silver in a note from our Berlin correspondent in THE LANCET of Dec. 18th, 1897, p. 1628, and subsequently it was examined in THE LANCET Laboratory and reported upon in an analytical record in THE LANCET of March 26th, 1898, p. 872. It is an interesting compound of silver with albumose which is soluble in water, the solution remaining undecomposed in contact with dilute sodium chloride or weak hydrochloric acid. Strong hydrochloric acid, however, converts the silver into chloride and liberates the proteid. Protargol is a powerful germicide and free from irritating properties, and thus it has been employed usefully in diseases of the eye. Latterly it has been used as a very satisfactory application in gonorrhœa. It possesses, in short, the advantages of silver salts for antiseptic purposes without the well-known drawbacks. The soloid is very convenient for the preparation of a solution of definite strength. Each soloid contains four grains of the silver proteid, so that one dissolved in an ounce of distilled water yields approximately a 1 per cent. solution.

VALTINE GLOBULES (MEDICATED).

(THE VALENTINE EXTRACT CO., LIMITED, 33, TOOLEY-STREET, LONDON, S.E.)

The Valtine globule containing nutrient meat extracts offers certain distinct advantages which we have pointed out on a previous occasion. The extract itself contains a definite and satisfactory proportion of the nourishing constituents of meat, in addition, of course, to the important and stimulating crystalline principles. We have recently received for examination Valtine meat globules with the addition of quinine, maltine, and pepsin respectively. The presence of quinine was easily confirmed, though of course there is no indication of this drug to the taste when the globule is swallowed. Similarly we found that the globule containing malt extract contained the digestive enzyme of malt unimpaired, for the contents of the globule readily digested starch. Lastly, the globule containing pepsin may be regarded as self-digestive, for on keeping the contents at blood heat for a short time peptones were found to be present in the liquid in important amount. These preparations should clearly be of service and they are certainly convenient.

1. MILKINE FOOD; 2. ANTI-ASTHMATIC POWDER.

GILBERT KIMPTON AND CO., 19, ST. DUNSTAN'S-HILL, LONDON, E.C.)

Milkine food is described as being made from cow's milk, malted barley, glutinous flour, and beef, with a small proportion of lime and common salt. It is a yellowish-white powder which is in part crystalline, and it possesses a strong malty flavour and smell. As will be seen from the following analysis, it contains a rich proportion of proteids. Our analysis gave the following results: moisture, 3·63 per cent.; mineral salts, 3·30 per cent.; proteids, 13·87 per cent.; fat, 6·50 per cent.; maltose dextrine, &c., 72·70 per cent. According to this analysis the food when prepared for use in the way enjoined would be deficient in fat. Under the microscope characteristic crystals could be seen but no meat fibre, so that, we presume, in its preparation the soluble portion of meat is alone added. The food is remarkably soluble in water, the solution presenting the appearance of milk. Considering the plan of preparation the food is undoubtedly of an easily digestible character and is therefore a valuable article of diet. Physiologically speaking, however, the food elements are not in correct ratio. It should be remembered that human milk contains a large proportion of butter-fat. Favourable reports are quoted concerning the action of the anti-asthmatic powder in the relief of dyspnœa and other asthmatic symptoms. It consists, according to our analysis, of a dried herb containing a definite proportion of nitre. The powder deflagrates gently on ignition and gives off an abundance of fumes which may be conveniently inhaled. The fumes are not disagreeably irritating.

V.V.O. SCOTCH WHISKY.

(JAMES MARTIN AND CO., LEITH.)

Submitted to analysis this whisky gave the following results: alcohol, by weight 40·30 per cent., by volume 47·67 per cent., equal to proof spirit 83·54 per cent.; extractives, 1·05 per cent.; mineral matter, *nil*; and acidity reckoned as acetic acid, 0·02 per cent. The spirit is described as containing some of the oldest Scotch whiskies procurable and as a product derived from the careful blending of some of the best whiskies distilled in Scotland. These statements are so far borne out by the mellowness of its flavour and its freedom from crude derivatives. The spirit is very soft to the palate and is quite free from any trace of "burning" taste. The results of analysis are satisfactory and coupled with the softness of flavour are quite in accordance with the statement that the whisky has been thoroughly matured. It is therefore dietetically suitable.

MONTAGUE ROSE CREAM SOAP.

(ARTHUR AND CO., 69, BERNERS-STREET, LONDON, W.)

This is a soap of excellent quality containing a maximum proportion of pure soap basis. We could trace no injurious constituents in it, but found two well-known antiseptics in small quantity which add to its value as a cleansing agent. It is delicately perfumed and contains a slight excess of fat and is accordingly free from the injurious free alkali found in coarse soaps. It is not only well adapted for the ordinary toilet purpose of a soap but is also emollient and antiseptic by reason of the particular medicaments contained in it which are well known as being beneficial to the skin.

ANTIKAMNIA CODEINE TABLETS.

(J. M. RICHARDS, 46, HOLBORN-VIADUCT, LONDON, E.C.)

We have previously shown that antikamnia is a compound of antifebrin, sodium bicarbonate, and caffeine—an admittedly useful combination in the exhibition of an antipyretic and analgesic. Codeine is now added to the combination with the object of ministering to the respiratory tract when in a condition of irritation or inflammation.

TROPON PREPARATIONS AND OATMEAL COCOA.

(ARTHUR REINER AND CO., DASHWOOD HOUSE, OLD BROAD-STREET, LONDON, E.C.)

Tropon is essentially dried albumin and therefore a powerful food. As we have previously shown, it contains very nearly the proportion of nitrogen present in pure albumin. Tropon is now contained in many articles of diet, thus adding very materially to their nutrient value. We have, for instance, examined tropon biscuits which contain nearly twice as much nitrogenous substances as is contained in the ordinary biscuit. The mineral matter, rich in phosphates, amounted to 2 per cent. and the moisture to 4·83 per cent. The biscuits have a satisfactory flavour. We have also examined tropon rusks and chocolate which are enriched in a similar way. Lastly, the same firm has sent us a sample of oatmeal cocoa, which combines both the nourishing and stimulating properties referable respectively to oatmeal and to cocoa. The admixture can be plainly ascertained under the microscope. There is little doubt that the combination is a valuable dietetic one, though obviously both ingredients may be taken separately, and,

perhaps, with advantage from the point of view of the respective flavours of each.

INVALID FOODS.

(C. SHIPPAM, CHICHESTER.)

The foods consisted of chicken broth jelly and beef-tea contained in vacuum sealed glass jars. Both preparations were found to be in excellent condition when the jars were opened and careful search failed to reveal any objectionable preservative. The chicken broth jelly was practically clear, but on heating small flecks of albumin separated. The jelly possessed an excellent and delicate flavour such as would appeal to the invalid. The beef-tea contained the real nutrient portion of meat as well as the extractives. Both are very acceptable invalid foods, possessing a high nutritive power.

DIGESTIVE FOOD AND BISCUITS.

(DUNSTABLE'S FOOD CO., LIMITED, MILFORD WORKS, QUEEN'S-ROAD, BATTERSEA, LONDON, S.W.)

Practically the same ingredients are employed in both these so-called digestive food and biscuits. As is so often the case the word "digestive" is here wrongly used. What is usually meant is digestible and in that way indigestion may be to some extent avoided by the use of such foods. In that sense we agree that this food is of value because it consists largely of one of the best-known digestible pulse foods which contains further a very high proportion of proteids. We found that the proportion of proteid in the food was nearly 20 per cent., which is a very high proportion. The moisture was 9·06 per cent. and the mineral matter 2·70 per cent. The cereal flour used also in the composition of this food possesses well-known nourishing qualities. Whilst admitting, however, these advantages in regard to these preparations we cannot view them as presenting any novel or striking feature.

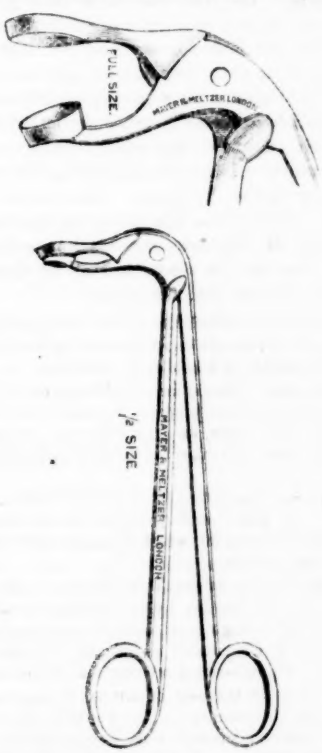
ASYLUM REPORTS.

City of London Hospital for Mental Diseases, Stone, near Dartford (Annual Report for 1899).—The average number daily resident at the institution was 485 patients—viz., 241 males and 244 females, showing an increase of five on 1898. During the year there were 152 admissions—viz., 90 males and 62 females, of whom six males and four females were re-admissions. As regards bodily health, nine males and six females were in bad health and 21 males and 28 females were in feeble health on admission. Regarding the mental condition, nine males and one female among the admissions were suffering from general paralysis of the insane, 24 males and 10 females from the more acute forms of mania and 15 males and 10 females from acute melancholia. Dr. Ernest White, the medical superintendent, states in his report that the causation of insanity in the admissions was but little changed. Heredity, previous attacks, and intemperance in drink head the list, while mental anxiety and worry, adversity, and accidents come second. During the year the cases discharged as recovered amounted to 66—viz., 42 males and 24 females, a ratio of 13·6 per cent. on the average number resident. There were 36 deaths during the year among the patients—viz., 23 males and 13 females—and 28 post-mortem examinations were made. The total deaths amounted to 7·4 per cent. of the average number resident. Of the deaths two were due to senile decay, two to tuberculosis, five to chronic Bright's disease, six to chronic cardiac disease, and 10 to general paralysis of the insane. The ratio of deaths from tuberculosis is low and this is attributed to the healthy site of the building and to the system of ventilation and lighting of the wards. This institution receives private patients and 50 such patients, 20 males and 30 females, were admitted during the year. Of these 28—viz., 12 males and 16 females—were transfers from other asylums. At the close of the year there were altogether in residence 133 private patients (59 males and 74 females). 12 of this class (six males and six females) were discharged recovered during the year. The success of this undertaking continues unabated. The general health of the community has been good, a few mild cases of enteric fever, influenza, and measles having occurred, all of which recovered. It is hoped that "with the plastering of the walls throughout the building and the renewal of the floors these sporadic cases of enteric fever shall be got rid of." Two small fires occurred at the laundry without serious consequences. On Oct. 11th, 1899, the east wing of the new male hospital was opened for patients. The farm working for the year shows a net profit of £340. The electric fittings are completed and there is now electric light throughout. The new female hospital, the male hospital, and the general and foul laundries are nearly completed, and a chapel is being erected which will be finished by midsummer.

New Inventions.

A NEW TONSIL FORCEPS.

THE accompanying diagram illustrates a tonsil forceps or "punch" recently made for me by Messrs. Mayer and Meltzer, 71, Great Portland-street, W., for the removal of large flat tonsils which cannot be engaged in the ring of an ordinary guillotine. In such cases the tonsil is elongated in a vertical direction, and the great advantage possessed by this instrument is that its cutting action is from before backwards and not from above downwards, as in Ruault's and Kretchmann's forceps. The latter action creates a difficulty which will be at once appreciated by those who are familiar with the instruments mentioned. With the instrument made



for me the largest tonsils can be efficiently removed in the course of two or three sittings, and with as little, if not less, pain than is caused by other methods. The great saving of time by this process of "morcellement" constitutes a marked advantage over puncture by the galvano-cautery as a means of reducing enlarged tonsils.

HERBERT TILLEY, F.R.C.S. Eng., M.D. Lond.,
Surgeon to the Golden-square Throat Hospital

THE LANCET.

LONDON: SATURDAY, MAY 5, 1900.

ON Friday, April 27th, the Nottingham bench of magistrates resumed the hearing of a case in which a matter most important to the medical profession and the public arose. Shortly the circumstances stood thus. JOHN FRANK WOOLLEY applied to the bench for relief from a maintenance order upon the ground of the adultery of his wife, MARY WOOLLEY. Mrs. WOOLLEY had obtained a separation order against her husband in 1898. The solicitor for Mr. WOOLLEY said that in order to prove the wife's adultery he would call Dr. W. HUNTER who had attended the woman. At the commencement of the hearing, which took place on April 20th, Dr. HUNTER refused to state the nature of the patient's illness, saying that he was bound by an oath not to divulge anything respecting his patients. The case was therefore adjourned until April 27th. At the resumed hearing Mr. BARLOW, the solicitor for the husband, examined Dr. HUNTER, and, having drawn from him the admission that he had attended Mrs. WOOLLEY about a month previously, continued: "Was she suffering from illness?" to which Dr. HUNTER replied "Yes." Mr. BARLOW then asked, "What was it?"—a question which Dr. HUNTER, addressing the bench, still respectfully declined to answer. The husband was then called and gave evidence, after which Dr. HUNTER, recalled, in answer to Mr. BARLOW, gave his reasons for refusal as follows. They are so admirable that we quote them as supplied to us by Dr. HUNTER himself.

"My reasons for refusing to answer the questions are:—

Firstly, that it would be a breach of professional secrecy, which conscientiously I hold to be inviolable.

Secondly, that it would be an infringement of my graduation oath—which I am prepared to read if the magistrates wish it—an oath which, as a graduate of a Scottish university, I took not to divulge anything in connexion with my patients.

Thirdly, that the infringement of this oath might render me liable to pains and penalties at the hands of the General Medical Council, which Council might disqualify me from further practice.

Fourthly, that to answer this question might render me subject to an action at law by the defendant in this case.

Fifthly, that no high legal decision has ever been given as to the power of magistrates to demand or to extort answers to questions of professional secrecy in a civil court.

Sixthly, that in the case of KITSON *v.* PLAYFAIR Justice HAWKINS in his summing up said words to this effect: That he could quite understand a case—especially a civil case—where a doctor was quite justified in refusing to divulge questions of professional secrecy.

Seventhly, that to answer such questions would give solicitors and magistrates unlimited power to drag from medical witnesses questions of professional secrecy and confidence, and that therefore it is probable that people might suffer serious illness rather than call in medical advice so long as the possibility exists of these questions being made public in open court.

Eighthly, that—with the greatest possible respect to your worships and the magisterial bench in general—this is a point which ought to be decided by the highest legal court."

After counsel on the respective sides had spoken on the matter as affected by the Summary Jurisdiction Act of 1848, the bench retired to consider their decision and on returning intimated that they were not prepared to order Dr. HUNTER to answer the questions as they were of opinion that he had offered a just excuse for refusing. They would give facilities for an appeal to a higher court and the case would be adjourned for a fortnight.

The decision of the Nottingham bench is one which, whether or not it be strictly legal, is without doubt one of equity. The medical profession has no guaranteed position upon this matter such as is, and has been for ages, accorded to the members of the clerical and legal professions. The seal of confession is inviolable, and so great an authority as Lord COKE expressly refers to the legal secrecy of confession, although he was anxious to exclude cases of high treason from the privilege. Communications made to a solicitor are absolutely privileged—expressly in the interest of the client. But to the medical profession no such protection is accorded, although there is a tacit understanding amongst medical men that secrecy is an absolute necessity. There is, of course, a mercenary side to this view, for doubtless a medical man who had a reputation for letting out the secrets of his patients would very soon have no patients to betray; but apart from this we must consider the point so clearly set forth in the seventh reason given by Dr. HUNTER—namely, that people might choose to suffer from serious illness rather than confide their secret to a man from whom it might be obtained and through whose agency it might be made a subject of public discussion. The duty of a medical man being, if possible, to save life it may become necessary for him under certain conditions to communicate what he knows or suspects to a third party about a patient's illness. Take, for instance, the case of a wife being slowly poisoned by her husband, the poison being added to the medicine supplied by the medical man. In that case it is the medical man's best course to communicate his suspicions to another medical man and also to warn the husband that if the patient does not get better certain steps will have to be taken. Such a case occurred in the practice of the late Dr. CHARLES WEST and is reported by him.[1] But such a case stands upon a different footing to that of an illness which only affects the patient himself. Knowledge concerning such should to our mind be absolutely privileged. The point will apparently be argued before a higher court of law than a magisterial bench and the decision will be one of the most extreme importance, not only to medical men, but to the community at large. It will also be interesting to see which of Dr. HUNTER'S reasons most impressed the bench. The counsel who represented Dr. HUNTER'S patient laid stress upon the graduation oath. But every medical man is not a graduate of a Scottish or of any other university, and although

[1] Dr. Charles West: The Profession of Medicine. Kegan Paul Trübner, and Co., Ltd. 1886.

theoretically the Hippocratic oath is binding yet it has no legal force.

Whatever be the decision of the superior court we consider that the same law should exist in this country as is the case in the United States. There the Church, the law, and the medical profession are all equally bound to preserve their patients' confidence. The same ruling exists in France. In any case Dr. HUNTER will have gained the sympathy and the gratitude of his professional brethren for the firm stand which he has made and we may hope that the disabilities under which the profession of medicine at present labours will be before the dawn of the coming century for ever removed.

WE are all agreed in thinking that one of the greatest improvements in the treatment of the sick in the Victorian era is that which has resulted from the development of better nursing. The provision of a good nurse in severe cases, whether chronic or acute, immensely adds to the comfort and advantage of the patient. She—we are assuming that in most cases the female nurse is the better — saves the health of the friends and relatives of the patient by taking off their hands for a large portion of the 24 hours direct responsibility for the patient. She leaves them time for rest and for the duties of the household. If emergencies arise she is a source of suggestion and support. The various amenities of the sick-bed are practised with a tact, and a tenderness, and a skill that lessen the fatigue and disturbance of the patient. It is true that she has not the same human interest in the case that relatives have. This is both an advantage and a disadvantage, and the advantage prevails, always presuming that the nurse has the qualities proper to her calling. If she is not tactful, and tender, and skilful she has mistaken her career. The patient or the friends of the patient will refuse to give her that confidence which is essential to her work and they may even be justified in asking to have her replaced. But granted that she has these qualities, it is good that she is not a relative. Her emotions are not involved so as to hinder her self-possession. She can sleep well, and eat well, and take the air well, which important functions are all apt to be disturbed in the case of affectionate relatives, especially if the exigencies of the case are such as to require continuous attention night and day. All this being so, there is every prospect that nurses will be more and more in demand with the progress of civilisation and the increasing division of labour.

Now comes a difficulty—the question of cost. The modern tendency to over-train nurses makes them necessarily more costly; and we believe that we see an increase in this tendency. The result will be that great classes of the community will be practically unable to have the advantage of good nursing. The cost is so raised by the inevitable expenses of the organisations, under whose care the nurses for the most part live while they are not in actual work, that the bill for nurses is very generally higher than the bill for medical attendance. This position is so real already that the advantages of a nurse are practically confined to the rich and to the poor. Thanks to the charitable instincts of the public it is possible in most districts now to get the help of a nurse for the poor without any cost to them, and an enormous amount of suffering is saved and much good is done by district associations for this purpose. On the other hand, the rich can have a nurse, or in a severe case two nurses, without inconvenience. But for the great middle section of the community the cost of nursing is growing such that it will be, if it is not already, practically prohibitive. Nursing will have to be regarded as a luxury beyond the reach of these classes. What would be thought of the medical profession if its help could only be had by the wealthy sections of the community—if nobody need apply to it who was not prepared to spend two or three guineas a week or at the rate of 100 to 150 guineas a year? For this, practically, is the present state of things as respects nursing, with the result that large numbers of cases have to go without its benefits. We know, of course, that the charge for nurses must in the end be regulated by vulgar rules of demand and supply, and we are prepared to be told that the value of skilled labour has so much increased that nursing cannot be done for less. Quite so; but the question is whether the public always gets the exact attention which the circumstances of the case demand. While there are many cases in which high training and large experience are needed in nurses, and where absolute attention is required of them hour by hour, there are thousands of cases in which the help of a nurse of good common qualities for a portion of the day or night, or for a daily visit or two, would be invaluable. For these cases little or no provision is made, only the costly article is supplied whether it is needed or not. We feel that nursing authorities and those who take trouble to organise the supply of nurses for the public cannot be congratulated on their success till provision is made for the care of slighter cases and till nursing can be supplied to the numerous middle and lower middle classes in such forms and quantities and on such terms as are practical.

It is not good for nurses any more than for the public that nursing should be considered a luxury of the rich or a charity for the poor. The high and religious conception of a nurse, which commands universal respect, is that she, like a soldier, is ready, when necessary, to endure hardship. It will be a misfortune if a different conception of the nurse and her wants comes to be entertained, if it comes to be thought that she is not available in humble homes, but must be regarded as one requiring to be waited on rather than as one who should relieve those already overburdened with duties. Surely the nature of woman and the fact that many women are yet without employment or function in society should suffice to correct the defect of which we are writing. Nursing should be as available for the sick of the middle-classes as it is for the rich on the one hand and the poor on the other.

ON Saturday night last the Reform Club was the scene of a dinner to those two distinguished surgeons Sir WILLIAM MACCORMAC and Mr. FREDERICK TREVES who have returned from South Africa after the discharge of duties the importance of which can hardly be exaggerated. The dinner was designed primarily to honour them, and while its object was carried out completely it became also the occasion of honour to the Army Medical Service in a remarkable manner. And this was fitting, for we have

no hesitation in saying that the presence of eminent civilian surgeons in South Africa, able to appreciate the work of that service and to bear unprejudiced and enlightened testimony to its value, has been a great factor in convincing the nation that hitherto the work of this department has been unduly slighted. Lord ROSEBERY, who presided over the dinner, is certainly the most felicitous public speaker in England at the present time, and to our mind this is not because he is a humorist, a scholar, and a man of the world—though he is all three—but because he has extraordinary powers of sympathy. Lord ROSEBERY in a full-dress debate at St. Stephen's, or on the political platform, or giving away football prizes, or unveiling medallions, is always able to prove that he appreciates to the full the sentiments which have brought his audience together. With some of these sentiments he may agree, and with some he may not; but he never fails to show that he knows more than the bare facts of the matter under consideration and that he can gauge the feelings which those facts inspire. Hence his oratory is attended by unfailing success. Of Sir WILLIAM MAC CORMAC and Mr. TREVES Lord ROSEBERY said, in wishing health and prosperity to them, only what the circumstances which led to their presence as guests of honour at the Reform Club demanded; but the medical profession, which is honoured by any honour shown to its leaders, will be grateful to him that he did not stop at a eulogy of the two great surgeons but went on to include in his praise the medical organisation of the South African campaign and the Army Medical Service which has been responsible for it. "We are not merely," he said, "honouring acts of patriotism on the part of Sir WILLIAM MAC CORMAC and Mr. TREVES, but we are recognising something more which is not, perhaps, so much recognised as it ought to have been—we are paying honour to two non-combatant members of our army." Lord ROSEBERY could not, we are sure, have given greater pleasure to the two distinguished guests of the Reform Club than by thus pointing out that the occasion of honouring them was a good opportunity for publicly recognising the excellent work and personal bravery of that service which is called upon to undergo all the hardships and well-nigh all the dangers of war.

Sir WILLIAM MAC CORMAC'S speech in reply has no doubt been read in the daily press by most of our readers; while that portion of it which referred to the extraordinarily small amount of permanent damage that is done to the soldier wounded by the Mauser and Lee-Metford bullets is particularly familiar to those who have followed the story of the medical aspects of the war in THE LANCET. For in our columns Sir WILLIAM MAC CORMAC has detailed case after case where perfect recovery, sometimes without symptoms, has ensued upon injuries which are described at the present time in many of the recognised text-books as always terrible in their results and possibly fatal in their issue. There is another side to Sir WILLIAM MAC CORMAC'S speech to which we should like to draw attention. Like the consenting lady in the poem, while avowing that he would not talk politics Sir WILLIAM MAC CORMAC talked politics to some purpose, and we hope that his forecast of the ultimate benefit to our empire by the South African war will be justified. He held that the war was one of the best things that could have happened to England, because it had brought out the manhood of the national character and displayed our brave bearing in evil circumstances to other nations. In particular he said the events of the past six months would unite the colonies to the mother country, while they substituted in South Africa for a narrow and corrupt oligarchy the just and honest government which is synonymous with British rule. This is a fine picture, and when outlined for us, not by a professional politician or by a theoretical historian, but by a man of Sir WILLIAM MAC CORMAC'S position and opportunities of obtaining actual knowledge, we are bound to regard it as drawn from nature and not as a fancy sketch. Sir WILLIAM MAC CORMAC believes that the forces of law and order and the spirit of fairness which will be brought to bear upon the Transvaal and the Orange Free State as soon as their submission is obtained will speedily turn our foes into our friends. We trust that this will be so, and hope that no efforts will be spared on our side to bring about so desirable a result.

Two great points were made by Mr. TREVES in his outspoken acknowledgment of the compliment paid to him by the Reform Club. In the first place he gave the British soldier a fine testimonial for courage and endurance. It is true that no such evidence was required, inasmuch as for the last six months every newspaper published in our language has borne similar witness; but to our mind the surgeon's certificate is of particular significance and well merits to be put upon record. The courage of enduring before a fight, the courage of putting up with everything so that the foe may be reached, the courage employed in the actual assault,—all these are magnificent. But Mr. TREVES told the story of the courage displayed by the soldier when all incitements to be brave were gone, when all the glorious concomitants of war were absent, and when physical pain would have condoned in him the completest surrender to despair. Mr. TREVES found the wounded soldier animated chiefly by the desire to save his medical attendants from trouble and the resolution to reject all ministrations for himself until he was certain that there were no others whose plight demanded assistance more pressingly than his own. High as the public opinion of the private soldier has been throughout the war we venture to think that Mr. TREVES'S portrait of him, wounded but undaunted, suffering but unselfish, must tend to raise it higher. The second point which Mr. TREVES made was scored against the sensation-seeking women who have gone to South Africa masquerading as nurses. Dean SWIFT could hardly have said anything more apt, more contemptuous, and more wounding about these women than Mr. TREVES has done in bracketing them as nuisances with a plague of flies. We may be certain that after so pithy a summary of their irritating attentions the amateur nurses will spare the Army Medical Service and the sick soldiers in South Africa a further emigration from our shores. Indeed, we expect to learn that the next steamers that arrive from South Africa have brought back, with their diamonds and their trunks full of summer frocks, those who had previously selected our war hospitals as a theatre of self-advertisement.

Annotations.

"Ne quid nimis."

THE RETURN OF SIR WILLIAM MAC CORMAC AND MR. TREVES.

WE wish to add our hearty welcome and congratulations to the number of those which Sir William Mac Cormac and Mr. Treves have received on their arrival in this country from South Africa on the termination of their mission to the theatre of war. To ourselves and the readers of THE LANCET, however, the gratification, as far as Sir William Mac Cormac is concerned, is for selfish reasons not altogether unmixed with regret, seeing that we shall miss the appearance of the admirable series of articles, written while the observations and facts were still fresh in his mind, with which he has supplied the profession, together with his realistic pictures descriptive of the surgical and medical aspects of modern warfare. We may say that, in our opinion, the War Office exercised a very wise discretion in selecting Sir William Mac Cormac (and subsequently other hospital surgeons of distinction) for the work which he was called upon to perform; for, in addition to the high position which he occupies as President of the Royal College of Surgeons of England, Sir William Mac Cormac had already had a varied and very notable experience of the realities of war, conducted on a vast scale and on an historic occasion involving the end of a dynasty, and the remodelling of the map of Europe, as well as upon campaigns of lesser note. In addition to his experience in military surgery he had always taken a keen interest in the subject and had done his best so to systematise his investigations and observations as to raise the nature and treatment of gunshot wounds to the level of an exact branch of scientific inquiry. But there is no finality in such matters, especially where the rapid progress of modern discoveries and appliances in the art of war and in the surgical treatment of wounds has practically revolutionised our ideas. It must, therefore, have been with the keenest interest that Sir William Mac Cormac was able to contrast and compare the results of his past experience, when other weapons were used and when infection wound diseases were the despair of military surgeons, with the very different results which he saw on South African battle-fields and in South African war hospitals. Moreover, he had in the past rendered to the Royal Army Medical Corps most valuable aid in vindicating its claims and was therefore a *persona grata* to medical officers who had confidence in his knowledge and judgment as to the requirements of war and the practicability and possibility of their fulfilment or not under all its exigencies. To them he was a special judge and jury of their work. We have already given our reasons for approving the appointment of eminent hospital surgeons as consultants in the war-field and there is no need, therefore, to dwell upon those reasons now, but we may say that such consultants may be a very present help under circumstances of extreme difficulty, a source of confidence and satisfaction to the relatives and friends of the wounded, and a defence of the medical service against unfounded allegations. Mr. Treves has contributed to our contemporary the *British Medical Journal* a very vivid and striking account of his experiences during the war. We are sorry to note that his remarks at the Reform Club Dinner have in some quarters been misconstrued. No intelligent person could have credited him with casting any reflection upon those devoted women — whether professional or amateur—who have performed such unselfish and admirable work in alleviating the sufferings of our soldiers in South Africa. Probably there is no man in the world who has greater cause to estimate services such as these more highly than Mr. Treves, fresh from the war hospitals of South Africa. We understood him to refer exclusively to the butterfly type of women, who are out of place and, far from being a help, are a great hindrance on such occasions. The presence of such as these, no doubt, called forth the remonstrance which Sir Alfred Milner had previously made. At the theatre of war the drama that is enacted is too realistic and terrible to admit of emotional idlers taking any serviceable part in it.

EGYPTIAN VITAL STATISTICS.

DR. ENGEL BEY'S statistical publications represent a vast amount of labour under circumstances of unusual difficulty, but although belated and somewhat discursive they are always interesting. The third part of his *résumé* of the quinquennial period 1886-90, which has only just been issued, deals chiefly with the mortality in the towns of Lower Egypt up to the age of five years. In Europe the deaths among children between the ages of one year and five years generally amount to a little less than 50 out of every 1000 living, whereas in Cairo (where alone the necessary data were forthcoming) they exceeded 86 per 1000. In the towns of Lower Egypt infants of less than 12 months survive in a higher proportion than do their European coevals, while between the ages of one year and three years the deaths are relatively more numerous. This, as Dr. Engel points out, is no doubt the result of improper feeding after weaning or partial weaning. The following table (compressed from one given by Dr. Engel) shows the percentage of deaths at the several intermediary ages in each 100 deaths under five years of age.

Age.	Five cities in Europe (average).	Cairo.		Alexandria.	
		Natives.	Foreigners.	Natives.	Foreigners.
0–1	68·4	57·0	59·1	57·3	51·2
1–2	16·5	27·3	24·5	25·2	27·0
2–3	7·4	10·0	7·3	11·2	11·3
3–4	4·6	3·7	6·2	4·2	5·4
4–5	3·1	2·0	2·8	2·1	5·1

The correspondence between the figures that refer respectively to natives and foreigners (chiefly Europeans) is noteworthy, showing that the death-dealing agencies are not due to racial idiosyncracies, but to causes affecting all nationalities alike. It might perhaps have been anticipated that the offspring of European parents being more intelligently cared for would survive in relatively greater numbers during their second and third years of age, but apparently faulty feeding is equally to be blamed in this case too. One of the most fruitful sources of mortality among European children is diphtheria. In Alexandria it headed the list of fatal diseases and in Cairo also it committed serious ravages. Among the natives diphtheria is ostensibly far less prevalent, but unfortunately the art of diagnosis is still undeveloped in Egypt and dependence cannot therefore be placed upon the naming of the diseases in permits for burial. According to the mortuary returns the most common causes of death are gastro-enteritis and affections of the nervous and respiratory systems, but Dr. Engel is of opinion that in a large proportion of the cases the disease was really measles. Measles and its sequelæ were, he thinks, responsible during the quinquennium for at least 5000 deaths, or one-third of the whole, in the towns of Lower Egypt among infants between one year and three years of age; more than half of the cases occurring in the second quarter of the year and rather less than one-third in the third quarter. In 1886 whooping-cough gave rise to 964 deaths in Cairo and Alexandria, but in

the course of the four succeeding years the numbers decreased as follows: 1887, 553; 1888, 372; 1889, 210; 1890, 159. The reason assigned for this desirable declension is encouraging, the steadily lessening mortality being thought to depend upon a better understanding of private hygiene, together with a more intelligent treatment of the affection. Scarlet fever, although supposed to be introduced every year into the country, is very rare in Egypt; during the quinquennium only 16 fatal cases were reported. This immunity, which is shared by Algeria, is not in any way due, Dr. Engel believes, to climate. With Körösi of Budapest he concludes that there is a natural antagonism between scarlet fever and measles; that the two diseases cannot prevail in one place at the same time. In conclusion Dr. Engel formulates the following practical deduction from his investigations into the incidence of epidemic diseases in Egypt: (*a*) in ordinary times the deaths under one year of age exceed those between one year and five years of age; (*b*) infectious diseases as a rule affect children between one year and five years of age; (*c*) therefore, when the death-rate among children in the second category suddenly increases, rising above that of the "yearlings," an epidemic disease of one kind or another is certain to have broken out in the locality implicated; and (*d*) as a general rule that epidemic disease will be found to be measles.

ADAMS v. THE BRITISH MEDICAL JOURNAL.

ON April 30th Mr. Justice Lawrence and a special jury heard the case of Adams *versus* the *British Medical Journal*. The plaintiff, who is Mr. Charles Adams, is the editor of the *Verulam Review* and he sought to recover damages for libel. On Oct. 17th, 1898, Mr. Adams wrote to sundry experimenters who had licences under the Vivisection Act saying that the Home Secretary had informed him that "having in the course of your work last year applied for and obtained a certificate authorising experiments on dogs, &c., without anæsthetics on the express grounds that the experiments in question could only be so performed, you then, notwithstanding the certificate, performed them under anæsthetics, thereby plainly showing the incorrectness of the ground on which your application was based. Please observe that the statement is Sir Matthew White Ridley's, not mine. And as it certainly appears to cast a serious slur either upon your good faith or your professional competency I think it only right before making use of it to ask whether you admit its accuracy. If you do so pray do not take the trouble to write. Silence will be taken as assent." This letter was signed, "The Editor, *Verulam Review*." Mr. Justice Lawrence said of this effusion, when it came before him in the course of the trial, that "a more impertinent letter was never written by one man to another," a view which we endorse. The *British Medical Journal* in commenting on the letter alleged that it was misleading to drag in the name of the Home Secretary, for the facts were set forth in a printed paper which anyone could obtain. Further, the *British Medical Journal* stigmatised the editor of the *Verulam Review* as being "either ignorant of the terms of the licence or too careless to ascertain them," and finally printed a letter from the Home Office to one of the experimenters denying that the Home Secretary had ever made the observations attributed to him by the editor of the *Verulam Review*. That gentleman demanded an apology and withdrawal from the *British Medical Journal* which was refused and hence the action, which was begun more than a year ago and has been three times adjourned. Evidence was given by Professor Sims Woodhead, Dr. G. V. Poore, and other medical men to show that the only experiments performed without anæsthetics were hypodermic and other inoculations. The jury returned a verdict for the defendants. If we allow to Mr. Adams the honesty, however mistaken, of a fanatic, yet his methods of argument are, to say the least of it, peculiar. He charges medical men with getting certificates to perform experiments without anæsthetics and then abuses them, as showing either a want of good faith or incompetence, because they performed (or, rather, he said that they performed) experiments upon anæsthetised animals. He might just as well write to a country gentleman and say, "Sir, the Inland Revenue authorities inform me that you took out a game licence. Your keeper, however, tells me that you shot nothing but rabbits. This is either a slur upon your good faith or shows that you do not know the meaning of the word game." We congratulate our contemporary upon the only possible result of an action which has been pending for so long a time.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE next general meeting of the Medico-Psychological Association of Great Britain and Ireland has been fixed for Thursday, May 10th, and will be held under the presidency of Dr. J. B. Spence, at 11, Chandos-street, Cavendish-square, W., at 4 P.M. Much interest attaches to Dr. H. Maudsley's paper on "The New Psychology," which will take the form of critical remarks on the methods and aims of the new psychology, especially in reference to children and psycho-physical research, for not only is the subject an important one, but it is intimated that several psychologists and others interested in metaphysics will take part in the discussion. Dr. A. W. Campbell has promised to give a microscopic demonstration illustrating the arrangement of nerve fibres and nerve cells in the cerebral cortex of a series of idiots' brains, and Dr. W. J. Koenig will contribute a paper in English on "Pupillary Anomalies in Paralysed and Non-paralysed Idiot Children and their Relation to Hereditary Syphilis." On the evening of the day previous to the general meeting the Educational Committee will meet at 36, Queen Anne-street, while in the forenoon and early afternoon of May 10th other committee meetings will be held at Chandos-street. In the evening members will dine together at the Café Royal, Regent-street, at 7 P.M. Tickets for the dinner can be obtained (price 7*s.* 6*d.*, exclusive of wine) from the honorary general secretary.

CHARITY ORGANISATION AND PAUPERISM.

NOWHERE more than in the huge populations of London parishes should guardians of the poor be grateful for any help and coöperation to the experienced and systematic workers of the Charity Organisation Society. Such authorities are apt to be conceited from the very scale of their own experience. But it is that very scale which makes scientific investigation difficult, if not impossible. We are glad to see that the guardians of Islington, with its teeming population, are accepting the help of the Charity Organisation Society in the application of tests to prove the *bona fides* of applicants for relief. According to the *Islington Gazette* the result is very satisfactory to both parties. In the last twelve months in one district the society has dealt with 68 cases referred to them by the guardians. Of this number 21 families have been assisted, we presume by the society. Of the 47 cases not assisted 32 were proved to be of bad character and destitute principally through drink. Nine were cases of chronic illness and distress, three objected to inquiry and withdrew, and one, a girl, for whom a home was found, objected to go to it and disappeared. Three other cases were found to be able to help themselves. Disease is an unfailing element in poverty, but it is not so operative as the element of drunkenness which it is the wish of all true reformers to remove. The joint effort of legal and voluntary authorities in Islington to discriminate cases

of poverty is worthy of all imitation and is one of many signs of a real advance in the methods of society for its own elevation. It is beneficial all round; the rates of the parish are saved by it, and the deserving poor are helped in a way which is agreeable to their feelings of self-respect.

"QUACKS AND ABORTION."

OWING to the success of recent prosecutions and the publicity given to them the number of advertisements of quack medicines professing to procure abortion in pregnant women has considerably fallen off. That the sale of these concoctions was not likely to cease altogether was obvious, and we note that two persons, a man and a woman, have recently been committed for trial at St. Austell in Cornwall on a charge connected with the supplying of drugs for illicit purposes to a second woman. The man, a painter by trade, was originally charged with being drunk and disorderly, when letters found on him called the attention of the police to the more serious offence upon which he will in due course be indicted at the assizes together with a woman who seems to have acted at times as an intermediary in handing certain drugs and powders produced before the magistrate to their ultimate recipient. With the case pending against these persons we have nothing to do, but we may express a hope that the Cornish police will leave no stone unturned in the effort to bring home their responsibility to those who actually compounded and supplied the articles with which the alleged crime was to be committed. A painter by trade is not likely to have manufactured them himself and the person charged with him does not seem to have done so either. As far as the persons who buy and take these compounds are concerned no doubt the reading of newspapers and the knowledge of physical danger or of danger from infringing the law have deterred them during the past few months to some extent, and public feeling may also have been aroused against this form of crime.

THE MINUTE STRUCTURE OF THE MEDULLARY SHEATH OF NERVE-FIBRES.

IT is to be expected that with the application of new methods of staining and mounting specimens for microscopic examination new structural characters will be observed in the various tissues, or at least that more accurate conceptions will be obtained of features that have been imperfectly noticed by previous workers. An article written by Mr. William H. Wynn in the April number of the *Journal of Anatomy and Physiology* for the present year describing the minute structure of the medullary sheath of nerve-fibres is a case in point. Kölliker, writing in 1852 with the means of examination then at his disposal, could only describe the medullary sheath as a "viscid white layer," and subsequent microscopists gained no further insight into its structure till Ranvier, in 1871, described the nodes which bear his name and which were brought into view by picrocarmine and silver nitrate. The attention of histologists having been thus specially directed to the structure of the nerve-fibres a great number of researches were made by well-known observers with the result that the sheath was admitted by all to be composed of a supporting framework or stroma in the meshes of which a fatty substance or myelin was contained. The disposition of the fibres or membranes forming the stroma has been the subject of much difference of opinion, and reticulations and septa of neuro-keratin of various forms have been frequently depicted. The researches of Mr. Wynn have been chiefly made on the fibres of the sciatic nerve in dogs and cats which were removed immediately after death, placed in a 2 per cent. solution of formaldehyde, and stained by a modification of the Weigert-Pal process. The appearances then seen under a low power are that the axis cylinder is more or less deeply stained in its whole length, but the medullary sheath presents alternate stained and unstained portions. The stained parts are funnel- or cone-shaped with thin apices pointing in the same direction in any short length of the nerve. The cones appear to be solid and structureless; their wider end is as wide as the diameter of the sheath itself, whilst their smaller end embraces closely the axis cylinder. Examination with higher powers shows that the cones are not complete but are composed of several separate pieces which unite at the part in contact with the axis cylinder and become free at the wider part of the cone. These cones are placed at regular intervals of about their own length and call to mind the whorls of an equisetum. If a transverse section of a fibre be made the strongly stained axis cylinder is seen in the centre surrounded by a ring of medullary substance which is broken up by radially-arranged gaps into four, six, or even eight segments. This segmented ring occupies different positions in different specimens. It may be immediately beneath the primitive sheath, the space between it and the axis cylinder being unstained; or it may immediately surround the axis cylinder, having an unstained portion outside it and between it and the primitive sheath; or, lastly, it may occupy an intermediate position. The stained portions, including the axis cylinder and the cones with their segments, are highly protoplasmic and are not composed of neuro-keratin, which would not stain when treated by this method. The protoplasmic framework of the medullary sheath, it is thus seen, consists, first, of two thin layers, one beneath the primitive sheath, the other around the axis cylinder, both sheaths appearing to be continuous at the nodes, and, secondly, of a chain of cones connected with both layers of protoplasm, the base of each cone being in the peripheral layer and the apex in the central layer, and being composed of usually six segments. The neuro-keratin network usually described in books Mr. Wynn believes to be artificially produced from the protoplasmic layer beneath the primitive sheath. The incisures of Schmidt or Lantermann's slits may be, he thinks, ruptures in the medullary substance between the cones. Some good micro-photographic plates illustrate the statements made in the text.

THE PLAGUE IN AUSTRALIA.

THE plague statistics in Sydney for the week ending March 24th were as follows: admitted, 10; died, 3; remaining under treatment at the beginning of the week, 13; remaining under treatment at the end of the week, 20. Up to March 24th the total cases were 32, with 11 deaths. The total "contacts" isolated were 185 in number; there were five cases of plague among the "contacts." During the week two or three cases were met with in which the influence of the "infected area" could not be traced and in which the explanation of probable, or at least possible, contact with it could not be accepted on the ground of necessarily imperfect information. At the same time none of the persons attacked had acquaintance of any sort with any previous case. Five young children had been attacked up to the above date; all recovered except one. One case exhibited plague carbuncles; several other patients were convalescent, but evidently would only recover their health very slowly; heart weakness was general and was the prominent symptom among them. The general public had become alarmed, and a state of ill-suppressed panic existed. Some thousands of inoculations were performed in 10 days. The Medical Department had intended to reserve the prophylactic for use among those who inhabited or frequented the area within which all cases

had apparently originated, and for "contacts." But management of epidemics in countries governed by ballot-box is far from being a simple matter, and although the plan mentioned had been followed with some success very large numbers of persons who had in reality no occasion for this special protection received it by order of various Ministers. The Government also felt the expediency of doing something to appease the growing alarm, and after leaving everything to the department until its proper functions were almost suspended in favour of matters which should have been transacted, and which could have been much better transacted, by laymen, took the important step of declaring a small part of the city an infected area and of placing a still smaller portion within it under the maritime quarantine law. The implied definitions were justified by existent facts; but, unfortunately, the representations of the department, which showed the impossibility of applying maritime quarantine law to such an area, as well as its opinion that all that was likely to be of service could be done quite well under the Public Health Act, were disregarded. Secondly, the Public Health Act having been persistently neglected by the city council, within whose district the areas lie, in favour of its lenient, inefficient, and slow-moving Act of Incorporation, the department had arranged its plans so that it should for the nonce supersede the council, and, by way of sparing its susceptibilities, had caused the mayor to be appointed a member of the Board of Health—the superseding authority. The department was then ready to act in a summary and decisive manner, but at the last moment all was returned to the hands of the council—which, as usual, was not merely unprepared, but showed itself to be devoid of knowledge which any respectable inspector of nuisances would regard as elementary. Under these circumstances there was naturally a hopeless division of authority, but it was satisfactory to find that the reporting, identification, removal, and isolation of new cases, and the subsequent disinfection of premises, proceeded with regularity and promptitude.

WHAT IS A CUSTARD?

THERE is a tendency nowadays to reduce everything to a consolidated state and it has been predicted that some day it will be possible to carry a 24 hours' ration in the waistcoat pocket. But there is a vast difference between the chemistry of food and its actual value within the body, and we are not sanguine that life will ever be sustained satisfactorily by highly concentrated nourishment. In natural food there exists a factor which determines very largely whether that food is really able to support the vital processes, while it is known that in many prepared foods for some reason or other there is absent a vigour-giving quantity. The fact of sterilised milk sometimes giving rise to scurvy rickets in infants which may be avoided by the addition of fresh fruit or meat juice is an example. Next to the craze for consolidating foods is that of devising substitutes which are vaunted as equal to, if not better than, the original article. In this case distinct harm may be done. For instance, the public meet everywhere with announcements that they may dispense with eggs in the preparation of a custard. Custards without eggs would appear to be an article of extreme convenience to the cook, but it may lead to a very serious result to the invalid. The custard without eggs is usually a powder consisting of little else than starch coloured with turmeric (in one case we found a fluorescent aniline dye) to give it the colour of the yelk of egg. A custard prepared with custard powder is thick with starch, whereas a true custard is thick with the albumin of egg. It is true that it is usually suggested that the powder should be boiled with milk. Now such a powder is by no means a substitute for the true custard which is composed of eggs and milk. We have examined several powders and the albumin found in them ranged from 3 per cent. to *nil*, while in all there was absolutely no fat. The white of dried eggs contains about 80 per cent. albumin and 14 per cent. fat and the yelk about 30 per cent. albumin and 60 per cent. fat. Though it is of little importance when such a substitute is consumed by persons in health, yet in the case of an invalid the custard powder can in no sense be regarded as suitable. Indeed, the custard powder would not only be a starvation diet to the invalid but positively a source of injury in some cases. A custard containing little else than starch would be injurious to patients suffering from diabetes, but in this disease eggs and milk as in a true custard are a permissible and valuable diet. The true custard is a very nourishing and, as a rule, a very acceptable preparation to invalids and it should be pointed out that a custard powder without eggs cannot possibly replace the fresh egg. It is possible—nay, even probable—that amongst the poor the custard powder is regarded as a really efficient substitute for the true custard containing eggs and milk, but it is wrong to convey such an erroneous impression. The custard powder without eggs contains a very small proportion of albumin which is alone able to support the vital processes. In other words, a custard powder would be the slenderest straw for an invalid to rely on and some declaration should be made that custard powders without eggs are not suitable for invalid purposes. A true custard is very commonly an important portion of an invalid's diet, and it is very desirable that no false impression should be made as to the real nutrient value of substitutes for custard. The subject seems to be so important as to demand a legal definition of the custard, in which case the Food and Drugs Act might provide a remedy against any possible chance of deception in this regard.

SEPTIC THROMBOSIS OF THE CAVERNOUS SINUS.

IN the *Intercolonial Medical Journal* of Australasia for February Dr. J. Jamieson has published a case of this rare condition which presented the unusual feature of being apparently due to carious teeth. A woman, aged 22 years, had two teeth extracted for toothache and at the root of one of these, on the right side, an abscess was found. In the evening she had a rigor and on the next day she was feverish. After four days she had to take to bed. Seven more teeth were subsequently extracted. About 10 days after the first extraction she was admitted to hospital complaining of severe pain in the right temple and eye. The right side of the face was much swollen. The right upper eyelid was slightly discoloured but not œdematous. The temperature was 106·2° F. and the spleen could be felt. On the following day she had a slight rigor. The eyelid was more discoloured and was swollen. Next day the temperature was 105·8°. The eyelid was much swollen, reddened, and œdematous. The eyeball was bulging and there was chemosis. The fundus was normal. On account of increased proptosis and chemosis the conjunctiva was incised and a probe was passed to the back of the orbit, but only serous exudation escaped. The patient was delirious and had severe diarrhœa. Gradually the eyeball became fixed and the pupillary action lost, but some vision was still retained. On the eighth day after admission chemosis and œdema of the upper lid were observed on the left side. On the following day proptosis on the left side was observed, the temperature rose to 109°, and death occurred. At the necropsy the right cavernous sinus was found full of clots, partly firm and adherent, partly broken down and fœtid. This condition extended through the circular and transverse sinuses to the opposite side, where the anterior portion of the cavernous sinus was slightly

affected. An emissary vein passing through the foramen ovale was plugged. Pus which had apparently followed the maxillary branch of the fifth nerve welled up through this foramen. The vein passing through the foramen Vesalii was plugged with fœtid clot from the cavernous sinus to the pterygoid plexus. Dr. Jamieson thought that septic infection passed from the jaw by the dental and maxillary veins to the pterygoid plexus and thence to the right cavernous sinus.

MILK STANDARDS.

DAY by day evidence accumulates in favour of a higher rather than a lower standard for genuine milk being adopted for the purposes of public control. Thousands and thousands of analyses made of mixed milk have shown that the composition of genuine milk seldom falls below the standard adopted by the Society of Public Analysts. Indeed, there is little doubt that even this standard allows of the watering of some milks. Further evidence in favour of a higher standard has recently been brought forward by Mr. G. D. Macdougald, F.I.C., Public Analyst for Dundee and county analyst for Perthshire and other Scottish counties. The average composition of the entire series of 12,069 milks was as follows: fat, 3·82 per cent.; non-fats, 8·68 per cent.; and total solids, 12·50 per cent. Of course, the quality of milk is subject to variation according to the season. It should be pointed out that this important subject is being discussed by a Departmental Committee and it can hardly be supposed that their labours will be protracted since there is a vast accumulation of facts at their disposal connected with the whole question. We should like to add that hospital authorities would do well when agreeing upon a contract for milk-supply to demand an article showing a good standard quality. In no case, it seems to us, is milk adapted for invalid purposes (in which frequently it is the only food that can be given) which contains less fat than 3·5 per cent. and non-fatty solids less than 8·5 per cent.

THE INTERNAL SECRETION OF THE KIDNEY.

AN article on this subject founded on experiment by MM. Chatin and Guinard of the University of Lyons appears in the *Archives de Médecine Expérimentale* for March, and is on the whole unfavourable to the employment of renal juice as a therapeutic agent. The investigations made by Dr. Brown-Séquard in 1889 on the juice of the testes led him to suggest both on clinical and experimental grounds that the kidneys might possess special attributes and that uræmia might have more complex causes than mere auto-intoxication due to the non-elimination of excretory products. Later authors have adduced similar arguments to those advanced by Dr. Brown-Séquard, and have used others drawn from therapeutics. The clinical argument is that absolute anuria may exist for several days without uræmic phenomena appearing, although auto-intoxication ought to occur within three days, and observations to this effect have been made by Mercklen, Féréol, and Fowler. Féréol's case is typical; his patient had complete suppression of urine for eight days from calculi, and yet recovered without having had any symptoms of uræmia or any accessory symptoms such as vomiting or sweating. The only symptoms noted were that the pulse and the temperature in the rectum were both slightly lowered. In Fowler's cases, amongst 93 patients who suffered from anuria only 19 presented symptoms of uræmia. From these facts Dr. Brown-Séquard drew the conclusion that the kidneys form an internal secretion, the suppression of which produces those serious toxic symptoms which play so large a part in uræmia. Uræmia he believed to be not the result of the suppression of the renal excretion alone, but of the suppression of both the secretions of the organ, the internal as well as the external. The arguments, founded on physiological experiments, were also based on the experiments of Dr. Brown-Séquard and also on those of Meyer. The results of the experiments of both of these observers were that animals previously nephrectomised lived longer when kidney juice was injected into them than when they were not so injected. An improvement in the method of experimentation was made by Vitzou, who, instead of injecting kidney juice, used the defibrinated blood of a healthy animal. Vitzou found that nephrectomised rabbits which were not subjected to treatment lived from 16 to 32 or rarely 34 hours after the operation, whilst those that were treated lived 66 hours. Dogs that had both kidneys removed died in from 24 to 40 hours, but when injected with renal venous blood they lived for four days and 13 hours as a maximum period. MM. Chatin and Guinard quote the conclusions of several other observers to which their own are opposed. They then give the details of their own experiments. The kidneys were removed with every antiseptic precaution in three dogs and the serum from the blood of the renal vein of a goat was immediately injected into two of the dogs and repeated after eight hours and again on several occasions. The non-injected dog lived 63 hours, the other two lived 41 and 53 hours. Four other experiments were made with uniform and concordant results. In all cases the dogs into which the serum of the renal venous blood was injected died sooner than those in which no treatment was adopted. These observers consider, therefore, that the question of the existence of an internal secretion of the urine cannot as yet be satisfactorily answered and that no hasty generalisation should be made.

THE CHEMISTRY OF THE NEW HALFPENNY POSTAGE-STAMP.

THE nasty habit of licking postage-stamps with the tongue is, we fear, fairly universal in spite of the repeated warnings which have appeared in our columns from time to time as to the real dangers of the practice. Cases have been reported in which blood-poisoning was set up from this cause, a result which may be referred, of course, to the bacteriology of the postage-stamp rather than to its chemistry. Quite recently the postal authorities have made an alteration in the colouring of the halfpenny postage-stamp in order to conform with the colour of the stamp of the same value in other countries. The halfpenny postage-stamp is now coloured green instead of red. Green colouring matter is generally associated with arsenical compounds, but now that spinach green or chlorophyll and chromes have been introduced arsenical colourings are quite unnecessary. However, we have recently made a chemical examination of the new halfpenny postage-stamp and the results are of interest. The colouring consists, we found, of a mixture of Prussian blue and a chrome colour. There is no lead present or arsenic or any other mineral irritant. In short, we could find nothing in the colouring to which objection could be taken considering how common the practice of licking stamps is. The stamp gives up part of its secret of colouring when it is carefully burnt on a piece of platinum foil. The ash that remains shows perfectly the original design and lettering, but the colour is altered to yellowish brown consisting of a mixture of iron and chromium. The border yields a white ash as if in relief. When carefully obtained the ash is a perfect miniature of the original design, being diminished by about one half of the original size of the stamp. We also examined the gum and found it to consist of the so-called British gum which is obtained from starch. From the point of view of the chemistry of the new stamp there is no reason to suppose that it contains injurious substances and therefore licking would be harmless. But the

bacteriology of the stamp has to be reckoned with and that postage-stamps are liable to be infected with pathogenic organisms admits of little doubt.

THE WOUNDED IN THE PRESENT WAR.

As will be seen by the announcement in another column the subject for discussion at the next meeting of the Royal Medical and Chirurgical Society will be the "Wounded in the Present War," the discussion being opened with addresses by Mr. Frederick Treves and Mr. Clinton Dent. Sir William Mac Cormac will be present and will speak and the lecture will be illustrated by lantern slides from photographs by Mr. Treves and Mr. Dent. Sir William Mac Cormac's admirable articles which have lately appeared in our columns will have acquainted our readers with the remarkably slight effects of small-calibre bullets. As regards our own troops Sir William Mac Cormac is of opinion that the rapidity with which many wounds healed was due in great part to the prompt application of a first field dressing, in the use of which our soldiers have been carefully drilled by their medical officers. The small size and high velocity of the bullets also, however, play their part in inflicting merciful wounds—a point upon which we dilated in our issue of Dec. 16th, 1899, with reference to a paper by Dr. Arthur Keith and Mr. H. M. Rigby, which appeared in THE LANCET of Dec. 2nd. The older theories about gunshot wounds and their treatment have been completely upset by the experience gained during the present war and the forthcoming meeting of the Royal Medical and Chirurgical Society should attract a large audience.

HYPERTROPHIC DILATATION OF THE LARGE INTESTINE IN INFANTS.

PROFESSOR ALEXANDER JOHANNESSEN of the University of Christiania reports several interesting cases of the above affection in the February number of the *Revue Mensuelle des Maladies de l'Enfance*, and furnishes a critical and lengthy review of the literature of the subject. To Dr. Jacobi of New York credit is given for the first complete description of this affection. The troubles incidental to it are dilatation of the abdomen, chronic constipation frequently alternating with diarrhœa, and dilatation and hypertrophy of the large intestine, especially in the region of the sigmoid flexure. Ulcerative lesions of the large intestine have sometimes been found post mortem in severe cases, but the rectum has generally appeared to be normal. It has been noticed that shortly after birth the child appeared to suffer from some sort of paresis of the bowels. Frequency of the stools is variable and the intervals may be from a few days to even two weeks or more. When motions are passed they may be diarrhœal in character and may be attended by pain and prostration or occasionally be accompanied by vomiting. The colon and sigmoid flexure appear to undergo hypertrophy, as established by post-mortem investigation. To explain this, Dr. Johannessen calls attention to the anatomical fact that in infants the sigmoid flexure is very long and runs transversely from left to right and then returns from right to left to a point (near the second sacral vertebra) where the rectum begins. This may be because during fœtal life the large intestine, and particularly the sigmoid flexure, forms a reservoir for the meconium which accumulates there and produces distension of these parts, so that the sigmoid flexure especially attains a considerable size in the lower abdominal region as there is but little room for it in the infantile pelvis. The position of the sigmoid flexure was found to be variable, for in 276 necropsies it was found on the right side in 45 per cent., on the left in 48 per cent., and in the middle line in 6 per cent. The position of the sigmoid loop depends both on the length and laxity of its mesentery and on its contents, for if it is empty or only partially filled it forms several coils in the left or right iliac fossa or in both fossæ, while part of it descends into the pelvis alongside the rectum. If, however, the bowel be further filled or distended with air or water it changes its place and assumes such a position as to retard the forward movement of the intestinal contents. It is possible, for example, for distension of a coil to cause compression of an adjacent bend. Attention is also called to the fact, first pointed out by Treves, that local distension of the intestine may be due to nervous or vascular influences. Treatment has to be varied according to local indications and the necessities of the case. Dr. Johannessen does not think that the ulcerations met with in the colon are part of the etiology of the affection as they are not always present, but that they are the result of the retention and decomposition of fæcal matters, thereby causing local patches of inflammation and endarteritis.

THE PARLIAMENTARY VACANCY IN THE UNIVERSITY OF EDINBURGH.

As we write it seems possible that Sir John Batty Tuke may be returned unopposed to represent in Parliament the University of Edinburgh. We heartily wish that it may be so and in any case Sir John Batty Tuke has our best wishes for his success. It is altogether fit that a medical graduate of the University should stand as successor to the late Sir William Priestley. The preponderance of medical graduates in the University and the importance of the medical faculty in its work make this eminently reasonable, to say nothing of the need for a largely increased element of medical influence in the counsels of Parliament. Sir John Batty Tuke's personal qualities, if he is elected, are likely to make him a useful legislator. He is a man of sound judgment, special experience, good administrative ability, and high medical culture. He has a considerable knowledge of educational questions and the state of the standard schools of the country as they bear on the professions and as they affect the civil and military services. We have little knowledge of Sir John Batty Tuke's special political proclivities and we, of course, have from our standpoint but little interest in them; but he has one good quality—would that it were more common in men of all parties—he is thoroughly independent and untrammelled in all really debatable questions and will bring to bear on them an unbiased judgment.

TUBERCULOSIS IN SHEEP.

IN the *Journal of Comparative Pathology and Therapeutics* for this quarter Professor McFadyean has recorded the first authenticated case of tuberculosis which has been seen in this country in the sheep. The specimen consisted of part of the side of a sheep seized in a London slaughter-house. On the inside of the chest-wall and upper surface of the sternum there were clusters of nodules very like the "grapes" so frequently found in tuberculosis of cattle. These contained caseating and partially calcified contents. No bacilli could be detected on microscopical examination, but their presence was effectually demonstrated by experimental inoculation under the skin of each of two rabbits. These animals died about five months later, the carcases upon post-mortem examination showing the lymphatics nearest to the seat of inoculation to be enlarged and caseating and numerous tubercles to be present in the lungs and kidneys. Tubercle bacilli were found in the lesions in the rabbits. A third rabbit was inoculated by material obtained from one of the others and it died three months later from tuberculosis; whilst a fourth rabbit inoculated from one of the lung tubercles found in the third died three and a half

months after the commencement of the experiment, and from the lungs of this animal a pure culture of tubercle bacilli was obtained. Professor McFadyean draws attention to the fact that, although this is the first case which has been recorded as occurring in England, tuberculosis of the sheep is met with to a certain extent in the German slaughter-houses. According to Friedberger and Frohner (Captain Hayes's translation) only five cases were found amongst 340,000 sheep killed in the Berlin abattoir during one year (1888–89), and out of 130,000 sheep killed in 1894 in Saxony there was a tuberculous percentage of 0·15. It is generally thought that the open-air life led by sheep is the main factor in causing their freedom from the disease and Professor McFadyean ascribes the more frequent occurrence amongst German sheep to the fact of their being housed in some districts during the winter months—not so much that the open-air treatment in itself has such an invigorating influence as that it places obstacles in the way of infection from animal to animal.

HONOUR WHERE HONOUR IS DUE.

THE dinner given by the Reform Club to Sir William Mac Cormac and Mr. F. Treves has been made naturally the subject of considerable comment in the press. It has been brought to our notice that several of our contemporaries have fallen into the error of attributing to the civilian advisers of the War Office the responsibility for the organisation of the Army Medical Service in South Africa. To the Medical Department of the Army, from the Director-General down to the latest surgeon to obtain his commission, is due the credit for the organisation of which Sir William Mac Cormac and Mr. Treves have been able to speak so highly, and, in our opinion, not the least valuable piece of this organisation was the enlisting for consultative purposes of the aid of eminent civilian surgeons.

THE HUXLEY MEMORIAL.

ON April 28th a large number of those representing science, literature, and art, not only in our own land but in foreign countries, assembled in the Natural History Museum, South Kensington, to honour the memory of Thomas Henry Huxley. The occasion was the unveiling of a statue by Mr. Onslow Ford, R.A., and the ceremony was performed by the Prince of Wales. Professor Ray Lankester briefly explained the inception of the idea, Sir Joseph Hooker formally handed over the statue to the trustees of the British Museum, and Sir Michael Foster followed, closing his speech with a few words of congratulation to the Prince of Wales on His Royal Highness's late happy escape. After the Duke of Devonshire had said a few words in his capacity as chairman of the memorial committee the Prince of Wales unveiled the statue and briefly referred to the time, 15 years ago, when he unveiled a similar statue of Charles Darwin. He would not, he said, in the presence of so many eminent men of science do more than endorse the words which had fallen from former speakers. The statue is of white marble upon a pedestal of yellow marble. Huxley is represented in academical robes and sitting. The likeness did not seem to us to be quite successfully caught, but the kindliness and strength of the man are very obvious and they were two most marked qualities in him.

THE dinner in aid of the funds of the Medical Graduates' College and Polyclinic will take place on Thursday, May 31st, at 7 30 P.M., at the Trocadéro Restaurant, Piccadilly-circus, the Right Hon. Lord Strathcona and Mount Royal in the chair. Preparatory to the dinner a conversazione will be held in the College on Saturday, May 26th, from 4 to 7 P.M., to inspect the new museum.

THE members of the Glasgow University Club, London, will dine at the Trocadéro Restaurant on May 10th, at 7.30 P.M., the Earl of Rosebery (Lord Rector of the University) in the chair. Members who intend to be present should give notice to Dr. Norman M. MacLehose, 13, Queen Anne-street, W., or to Mr. James M. Dodds, Dover House, Whitehall, S.W.

THE annual dinner of old students of King's College, London, will be held at the Holborn Restaurant on Monday, June 18th, with the Hon. Sir John Alexander Cockburn, K.C.M.G., F. & A.K C., M.D., Agent-General for, and formerly Premier of, South Australia, in the chair. H.R.H. the Duke of Cambridge has signified his intention of being present.

THE annual meeting of the Association of Asylum Workers will be held at 11, Chandos-street, Cavendish-square, W., on Monday, May 14th, at 4 P.M., when Sir James Crichton Browne, M.D., LL.D., F.R.S. (President of the Association), will preside. All interested in asylum work and workers are cordially invited to attend.

THE Colonial Office has received a telegram from Hong-Kong dated April 28th, 1900, stating that 52 cases of plague had occurred in the previous fortnight. 98 cases of plague have occurred in Hong-Kong altogether this year.

THE Past and Present West London Hospital Dinner will be held in the Empire Rooms of the Trocadéro Restaurant, Piccadilly-circus, on Monday, May 21st, at 7.30 P.M., Dr. Donald Hood in the chair.

SIR HENRY HARBEN will open on June 20th the new "open-air" wing which has been constructed to accommodate 40 patients at the North London Hospital for Consumption, Hampstead.

WE regret to announce the death, at the advanced age of 88 years, of Mr. George Viner Ellis, Emeritus Professor of Anatomy in University College, London.

THE Departmental Committee appointed to inquire into the use of preservatives and colouring matters in food met on Wednesday last in the rooms of the Chemical Society, Burlington House.

ROYAL INSTITUTION.—The Friday evening discourse at the Royal Institution on April 27th was delivered by Lord Kelvin who took as his subject, Nineteenth Century Clouds over the Dynamical Theory of Heat and Light. There were only two of these "clouds." The first was associated with the undulatory theory of light and was summed up in the question, How could the earth move easily and freely through an elastic solid, such as the luminiferous ether was supposed to be? To this question a definite answer had not yet been found. The other "cloud" was the Maxwell-Boltmann doctrine of the distribution of energy, some parts of which Lord Kelvin thought might be disputed.

UNIVERSITY COLLEGE, LIVERPOOL: POST-GRADUATE COURSE.—Arrangements have been made by Dr. John H. Abram, Dr. A. S. F. Grünbaum, and Dr. W. B. Warrington for conducting post-graduate courses in practical bacteriology and morbid histology during the summer session of 1900. Gentlemen who are desirous of joining the courses of lectures are requested to communicate with Dr. W. B. Warrington at the Thompson-Yates Laboratories, University College, Liverpool. The fee for each course will be two guineas. As several gentlemen have already sent in their names the classes will commence early in May.

CONFERENCE ON MEDICAL ORGANISATION AT MANCHESTER.

DELEGATES from over 50 medical associations and societies representing 4000 members met at the Memorial Hall, Manchester, on May 1st, for a three days' Conference on Medical Organisation. The Conference had been convened by the Medical Guild of Manchester to ascertain the opinions of the profession on questions needing reform, to instruct public opinion thereon, and to effect improvement in medical organisation.

Mr. Alderman F. H. WALMSLEY, M.R.C.S. Eng., (Salford), President of the Medical Guild, opened the proceedings and Mr. G. A. WRIGHT, F.R.C.S. Eng. (Manchester), was elected President of the Conference.

THE MEDICAL ACTS.

Mr. VICTOR HORSLEY then addressed the meeting upon the Medical Acts. He said:—

MR. WRIGHT AND GENTLEMEN,—I feel the honour you have done me in inviting me to give my views on the Medical Acts, because this meeting is the first of its kind and I hope it will be one of a series of important meetings of the profession, in which we shall have all the medical societies of the country brought together to discuss questions affecting the profession; and all the more so because it seems to be impossible to secure a similar discussion through the channel of the British Medical Association. I am not in favour of multiplying machinery in our profession, but it is evident that the annual general meeting of the British Medical Association does not cover what the programme of this Conference includes. I have much pleasure, therefore, in taking part in the proceedings, and it is my business to lay before you what is the fundamental position in medical reform, viz., the amendment of the Medical Acts.

I should like to admit that even among ourselves we are not all agreed as to the direction in which the Acts should be amended. I do not propose to waste any time in going into details as to how these Acts stand at the present time, but I wish to lay before you what I believe to be most advantageous in the way of amendment and I am gratified to find that my views are in consonance with those of the gentlemen who are going to move resolutions. The most fundamental question of amendment is that of representation on the General Medical Council and it is a question merely of practical politics. No Government will interfere with vested interests if it can possibly help it; and, moreover, there is a large body of professional men who are more or less satisfied with the work and methods of the medical corporations—I mean not only those who are hide-bound against all suggestions and protests, but I include the far larger mass of apathetic members of the profession. A large number of the profession are more or less satisfied with the present work of the corporations, and that is our first difficulty when we come to the House of Commons for reform on the question of representation. It seems to me that if the Members of the House of Commons were told that this is a question of fundamental political value—that is to say, that we consider that the practitioners throughout the kingdom, as members of the profession, have an inherent right to be represented more fully on the Council, some beginning towards a change might be effected. I must lay stress on the fact that the General Medical Council is unlike any other body under the Government, because it is like a department of the Government in a certain way, for it holds within its hands judicial power over every member of the medical profession. Any ordinary member of the community has an indirect voice concerning the appointment of those who judge his actions in regard to the community in general, and each member of the medical profession has a certain degree of representation on the General Medical Council which should, more or less, give a relationship in regard to the appointment of his judges; and yet we perfectly well know that representation is such a farce that it cannot be said that any member has any voice in the appointment which he should have in regard to his judges. If Members of the House of Commons understood that our feeling is that we should have proper representation to protect our own professional and personal interest, that would form the strongest argument to induce members to look favourably on our views. There is another point. I have often heard it quoted in the Council that in the House of Commons it is not fully understood that the General Medical Council is the arbiter of medical education. The requirements of medical education can only be properly estimated by those who are in the active conduct of their profession. The General Medical Council at present is an honourable retreat for members of the profession who have practically given up their work and who have lost all touch with the centres of education in the medical schools. If the House of Commons understood that movement for the increase of preliminary education came not from the Council itself but from the ranks of the profession, then the Members would recognise that a man in active work in his profession was a better judge of what lines education should take than the man who has more or less retired from professional work.

The Government and the General Medical Council.

I turn now to the next point in relation to the Government which the General Medical Council has to deal with and I will first consider reciprocity. The General Medical Council at the present moment is looked upon by the Government as the only representative body in the profession with which it can hold any communication. I do not think that fact is quite realised. The Privy Council is the department of the Government that has to do with our profession, and as a matter of fact I may mention that in connexion with the Midwives Bill the President of the Privy Council has refused to receive a deputation from the British Medical Association whereas he is in constant communication with the authorities of the General Medical Council. He listens to the General Medical Council, but he will not listen to the British Medical Association—the only body practically which represents the practitioner. What is the working result of all this? As regards reciprocity, until two years ago the Privy Council was entirely misled by the General Medical Council, but by dint of hard fighting we first got the General Medical Council to recognise what the actual position of the profession should be in relation to reciprocity, and then that was duly furnished to the Government. Owing to the difficulty in Italy, whereby a few of our colleagues are placed in the position that proposed legislation may compel them to take an Italian diploma, the question is being brought up again, and now the Privy Council has furnished the General Medical Council with a scheme whereby complete reciprocity shall be established between this country and Italy, although the advantages to this country are to my mind extremely shadowy. I may further point out that the whole of the difficulty, as far as our colleagues are concerned, could be avoided by the simple plan that new legislation of the kind should not be retrospective. If that were insisted on—and I shall endeavour to see that that point is urged—if the Privy Council would adopt that view, the present difficulty would disappear, and the question of reciprocity would be returned to the respectable limbo from which it has been dragged. On this question of reciprocity, surely the only reciprocity that we should contemplate is reciprocity between this country and its colonies. We should welcome a kind of federation of medical interests between the home country and the colonies, a parallel to imperial federation. I would, however, warn you that there is a certain party in the General Medical Council—who are extremely anxious, in spite of the notorious fact that every country on the continent, one after another, has closed its door to them, to open our doors as widely as possible to foreigners. With regard to the midwives question and its relation to the profession and to the Government the President of the Privy Council is acknowledging the General Medical Council as the only body representing the profession with which he should deal; and as I pointed out more than two years ago to the profession the attitude of the Privy Council is not favourable to the profession. The General Medical Council laid down certain principles which should safeguard the triple qualification under the Act in 1886, and these principles were duly forwarded to the President of the Privy Council who acknowledged them, but who now at this late hour is extremely anxious that perhaps the most fundamental of these should not be carried into effect. This is really a serious question. It is perfectly obvious that we cannot stand against a certain trend of opinion if that be held in the House, and we cannot block it. Much treacherous and misleading nonsense has been spoken to the profession on this subject. How far and what essential principles in the way

of protecting the triple qualification should be forced on the notice of the Government? But in this particular question the matter is not being fought fairly in many directions, and the point which I now wish to lay stress upon is this action of the Government. The Government has repeatedly stated that the present Midwives Bill is not a Government measure; nevertheless, two years ago it was thought that the Government was forwarding it, and now from direct communication with the officials of the Government it is found that they are absolutely hostile to the amendments and proposals of the profession, and that they favour in every way the proposals of the opposite party. On the question of practice it seems to me that the General Medical Council is put in this position with the Government, that it is the only body to which the Government can turn on questions affecting our practice, and we have therefore a right to claim greater representation on that Council. We naturally come to the other reforms which call for immediate attention, and you may remember that I reported some 18 months ago to the profession that the General Medical Council was in a state of financial instability. At the last session we discovered that, owing to the peculiar advice which we received from the legal advisers of the Council, the financial condition of the Council was in a condition of absolute and utter chaos. At this next session this matter will be brought out. I endeavoured to have it brought out at the last session in open discussion, but as usual the opponents of free speech moved that we should go *in camera*, and I cannot say what passed; but I hope we shall discuss the matter in this session in an open way. The financial arrangements of the Council being in a state of chaos, their re-organisation involves the re-organisation of the Council. At the present moment there is a General Medical Council and one branch for England, another for Scotland, and another for Ireland. These branches are absolutely useless; what we want is simply a central registration bureau and a Council elected from all parts of the kingdom. It is on account of the condition of these branch councils that this state of financial confusion has been brought forward; therefore, to put the matter right we must include these branches in the scheme of reform. There is another question—viz., the approximation of our plan of registration to that of the lawyers. Like the lawyers we should have an annual registration fee, and let me urge this upon you as a *sine quâ non*—it should form one of the chief factors in the platform of the reform of our Medical Acts. If we only had a small registration fee, one-tenth of what the lawyers pay, annually our numbers are such that the income of the General Medical Council will be more than ample to carry out the work that it ought to do and with greater effect. But I am aware of this—that there is an inherent opposition among the members of the profession to this suggestion of an annual fee. I do not know why, but there is the opposition, and it seems to me that it should be the duty of this conference to indicate the advisability of such an annual fee. If we had a strong financial position we should then have greater influence with the Government, for the Government of course looks upon all bodies that approach it in a kind of materialistic way, and if it knows a body is wealthy it considers that its stake in the country is greater. If then we can show that we are actually wealthy the Privy Council will receive us with more favour. The main question is our need of votes in the House of Commons, and it is obvious that something must be done in that direction.

Medical Protection.

Next comes the question of the protection of our work which also must come through a Government department—I mean, through the courts of law. The Government at the present time, as I said before, together with the House of Commons, shows a distinct tendency to observe and protect vested interests. I have contended for a number of years that we have vested interests bestowed on us by the Medical Acts. The Medical Acts conferred on us the right to practise, and by implication that right is not granted to anyone else. This question has been discussed with immense heat and as yet we are still in this position, that at the present time the whole of this matter as to who has the right to practise is in the hands of the magistrates thoughout the country and, further, that inasmuch as by our present constitution the magistrates are given by the Government the right to determine what is a question of fact, we are handicapped by reason of the circumstance that they do not confine themselves to the question which is put before them by the Legislature, but they go into questions of law. Having thus gone into questions of law we are then faced with this position, that any magistrate may give what decision he likes, though it may be totally contrary to that which a brother magistrate, sitting perhaps on the same bench, has decided, and yet carrying with it the same validity in the eyes of the law. I have selected and published in the *British Medical Journal* a number of cases in which our right to practise has been attacked and has been defended with or without success. The most striking example of the kind I allude to is the decision given in the Alabone case, in which a man who had been struck off the Register for infamous conduct was summoned for using certain bogus American degrees, giving such indications as to make them resemble American diplomas or degrees which are registrable under the present Act. Yet the lawyers of the General Medical Council presented the case to the magistrate in such a way that the magistrate decided that Alabone carried on a perfectly genuine practice and that his bogus diplomas were genuine diplomas. It is impossible to understand how any judicial mind could have come to such a conclusion, but there are the facts, and you have to face them. As to the action of the lawyers of the General Medical Council and their responsibility I have given notice that I shall draw attention to it. I do not think that we shall derive great benefit therefrom, but we shall have the opportunity of making a criticism which is wanted. To return to the question of how we are to meet this difficulty, I think it is extremely simple, and that is to adopt loyally and work earnestly for the amendments which the British Medical Association is bringing forward, and I will tell you how the matter stands. The Parliamentary Bills Committee prepared a draft Bill and that was duly sent up to the Council and was treated by them in, I am afraid, a not unfamiliar way, that is to say, they cut out all the important parts and returned the Bill in an emasculated condition, of no use to anybody. This action has now so far been negatived that we are very much where we were before, and the Parliamentary Bills Committee is going to bring forward the same amendments, and I hope the Council will adopt them and help to carry them forward to the Government. I have now arrived at the end of the time allotted to me and I would ask you to regard these matters from a practical point of view as being at present only able to be worked through the British Medical Association, and I trust you will give your help to raise the present position of the association into one of active energy.

Dr. T. W. HIME (Bradford and West Riding Medical Union) regretted that it was not possible to have any resolution passed on Mr. Horsley's speech. He did not make any allusion to those malarious mosquitoes who rejoice in having a peck and bite at Mr. Horsley now and then because he is not painted exactly all over according to their colour, and he could only suppose that every noxious insect must have some use in living. Mr. Horsley worked against the greatest odds for the sake of the profession and his labours should be properly recognised.

Dr. WILKINSON, in the place of Dr. OWEN MORRIS (Birkenhead), moved:—

That in the opinion of this Conference the Medical Acts require amendment, amongst other matters, in regard to protection of the public against illicit practice and in regard to death certification and the Inebriate Acts.

An amendment proposed by Dr. WOODCOCK raised a long discussion, but in the end the motion was carried.

Dr. A. COX (Gateshead) moved:—

That believing that general practitioners are insufficiently and inadequately represented on the General Medical Council this Conference is of opinion that there is an urgent necessity for an increase in the number of Direct Representatives and appeals to the Universities and corporate bodies to reform the mode of election of their respective representatives—i.e., that the representatives be chosen from amongst and by the medical graduates of Universities and from amongst and by the diplomates of the corporate bodies, and that failing voluntary action in this direction a clause be placed to this effect in any proposed Bill to amend the Medical Acts.

Mr. F. H. TINKER (Hyde) moved the following as an amendment, which was not carried on being put to the vote:—

That it is desirable that the constitution of the General Medical Council be so altered that at least 50 per cent. of its members be elected as *direct* representatives of the profession and that in any amendment of the Medical Acts a clause be inserted to effect this.

The original motion was then carried.

Dr. WILKINSON, for Dr. OWEN MORRIS (Birkenhead Medical Society), moved the following, which was carried:—

That it is desirable that general practitioners should have a much larger representation on the General Medical Council.

The conference then adjourned until 2 P.M. when Mr. R. B. ANDERSON, F.R.C.S. Eng., read a paper on "A Medical Polity: Corporate and Medical Reform."

THE MIDWIVES QUESTION.

Dr. A. COX (Gateshead) moved:—

That this Conference protests against any legislation that will have the effect of giving a legal status to midwives as a class.

He said the feeling of the profession was voiced at the Newcastle meeting, when a resolution was passed condemning any midwives legislation.

Dr. DOLAN (Yorkshire Branch of the British Medical Association) said the question was, did they wish to end or mend the midwives? and the answer was, end the midwives.

Mr. VICTOR HORSLEY said that he would not detain the meeting more than a few minutes. He asked what was that Conference going to do if it carried Dr. Cox's motion? If Dr. Cox's motion was carried surely the other motions that appeared after on the paper were absolutely out of order. When he read the programme he was interested to see the motion, and he thought that they would learn something on the question, but if their sources of inspiration were to be swept away it would be a great disappointment. As to the general question whether there should be any legislation or not, he would like to indicate that that matter had only apparently reached a head during the last month. He had been interested for a number of years in this matter, and to his recollection the facts had been discussed from top to bottom as to what kind of legislation was going to be adopted, but there had arisen at the end of last year a kind of gathering of the storm to oppose any legislation of any kind. Within the last month he had heard Mr. George Brown, in the Parliamentary Bills Committee, declare that it was permissible that midwifery nurses should be registered. No answer had been given as to what a midwifery nurse was, and they were thus brought to the conclusion that those at the Conference were really working to take measures in Parliament to absolutely exterminate the midwives. There could be no other logical conclusion, and they had heard Dr Cox say "Hear, hear," so it was clear that Dr. Cox wished that Conference of intelligent beings to take a share in the idea that the medical profession was to publicly work for the extermination of midwives. He (Mr. Horsley) could not agree to that, and he really did not suppose that that Conference could agree to it.

On being put to the vote the motion was carried by 19 votes to 16. On a vote by ticket so as to determine the voting by the number of members of societies represented by delegates the numbers were, for the motion 2204, against 1935.

MEDICAL EDUCATION.

Dr. A. STEWART (Manchester) moved:—

That while appreciating the action of the General Medical Council in raising the standard of preliminary education this Conference is of opinion that a still higher standard would further raise the status of the profession, collectively and individually, and promote the public welfare.

This was seconded by Dr. WILKINSON and carried.

Dr. S. CRAWSHAW (Ashton-under-Lyne) proposed the following motion:—

That it is desirable that every medical student should, subsequently to the date of his passing the examination in anatomy, physiology, and materia medica, be compelled to spend, as part of his curriculum, 12 months with a general practitioner.

Mr. GEORGE JACKSON (Plymouth Medical Society) seconded the motion.

Mr. ANDERSON moved as an amendment:—

That it is desirable that the right and opportunity of receiving pupils be restored to general practitioners, and that medical students be required under suitable regulations to spend one year as the pupil of a general practitioner either as part of his curriculum or in addition thereto.

This was accepted by Dr. CRAWSHAW instead of his proposition, and on being put to the vote was lost, only nine voting for it.

The Conference then adjourned.

The delegates to the Conference re-assembled on May 2nd at the morning session of the second day of the meeting under the chairmanship of Dr. E. JEPSON (Durham).

Dr. NASH raised a question as to the method of voting and Dr. WOODCOCK said that they ought to decide on the matter. It lay between one of two things: either they were playing at delegation or they were seriously representing the societies who had sent them. But the chairman decided that the committee must be the judges in the matter.

The following motion was proposed by Dr. DIXON (Birkenhead), seconded by Dr. HELME, and carried:—

That it is not desirable that midwives should be registered according to the provisions of the Bill at present before the House of Commons.

Dr. HELME moved:—

That this Conference, recognising the possibility of legislation for the registration of midwives, is of opinion that in order to minimise the danger of such legislation it is essential to provide for the following: 1. The midwife (*a*) shall attend the mother and child after labour; (*b*) and shall restrict her practice to natural labour. 2. Imposition of penalty for practice as well as for assumption of title. 3. Imposition of penalty for malpraxis and misconduct. 4. Compulsion of midwife to send for a doctor in case of anything abnormal or illness on the part of mother or child. 5. Direct medical supervision. 6. Direct representation of general practitioners on the Midwives Board.

Dr. HELME'S motion was seconded by Dr. RITCHIE, and carried unanimously.

The Conference then proceeded to hear a paper by Mr. GEORGE BROWN upon

MEDICAL CHARITIES: THEIR RELATION TO THE PUBLIC AND THE PROFESSION.

Mr. BROWN said: Whilst engaged a few days ago in searching for some reports and documents to assist me in preparing this paper I came across a copy of the long-defunct *London Students' Gazette*, bearing the date November, 1872. For that issue I wrote the first article, which was entitled "Precept and Practice," in which I pointed out that whilst our hospital teachers embraced every opportunity of impressing on the student's mind the high and noble character of the profession he aspired to enter their own every-day conduct in the pursuit of their calling was only too often calculated to bring medicine into disrepute. Among the practices I referred to as popular in the pursuit of notoriety and fees was the founding of special hospitals which was just then being extensively adopted with great success by specialists in diseases of the skin, throat, rectum, and other organs which require occasional attention of a reparative character. In that article I thus described the *modus operandi* adopted by the specialist in founding a hospital: "He hires two rooms on the ground-floor of a house in a by-street, one as a consulting-room, the other as a waiting-room, with a cupboard for dispensing, and then paints on the front of the house (if eyes are his speciality), 'The British National Universal and General Hospital for Diseases of the Eye.' A clergyman having been induced to become patron, a few private friends having consented to act on the committee, and the dispenser having expressed his willingness to receive subscriptions and donations, the claims of Dr. Retina's 'British National Universal and General Hospital' to public support are advertised in all the daily papers." Although well-nigh 28 years have elapsed since this description of one method of founding hospitals was written, it is equally applicable to the means adopted by the founders of special hospitals at the present time. These so-called hospitals are, to all intents and purposes the private property of the founders, who, although they may not derive any direct pecuniary benefit from them, find them extremely useful as a means of building up large and lucrative practices. That hospitals should be multiplied in this manner, and allowed to compete with old-established hospitals, is degrading to the profession and nothing less than a public scandal, and I feel sure that you will agree with me that steps should be taken to make it an indictable offence to solicit subscriptions from the public for so-called hospitals which are in reality only bogus institutions.

Hospital Abuse.

The question of hospital mismanagement, especially as regards the abuse of the out-patient departments, has occupied the attention of the profession more or less urgently for at least 30 years. To what extent the question was a burning one before the seventies I cannot say without searching through files of THE LANCET or the *British Medical Journal*, but I have documents in my possession relating to proceedings at meetings held at the residences of leading London consultants in 1870 of committees formed to consider the administration of out-patient hospital relief, which was then recognised as a gross abuse of charity. These committees were appointed at a meeting attended by a large number of the leading hospital physicians and

surgeons in London which was held at the rooms of the Royal Medical and Chirurgical Society on March 24th, 1870, and over which the late Sir William Fergusson presided. The members met on several occasions, but their action never got beyond the inquiry stage, except to pass some very pious resolutions which no one took the least notice of. Why this federation of consulting physicians and surgeons to remedy the abuse of hospitals came to an end without achieving any satisfactory results I am unable to say, but I strongly suspect that they speedily found that if they pressed for reforms they would have to throw up their hospital appointments, and we all know what this would mean to a consultant unless holding a position in the foremost rank. Since this fiasco consultants as a class appear to have washed their hands of the hospital reform question. Now and again we hear of a hospital physician or surgeon who has the courage to unburden his soul, as was done recently by Mr. C. R. B. Keetley, senior surgeon to the West London Hospital, at a public meeting convened by the Charity Organisation Society. During the last 25 years many attempts have been made by medical practitioners to remedy the abuse of hospitals, but it must be confessed that the results have been most disappointing. The question has been made the subject of inquiry by the Medical Defence Association, of which society I was the honorary secretary from 1875 to 1887, when it was dissolved; by a special committee of the British Medical Association; by a special committee formed by the Charity Organisation Society; by the Hospital Reform Association, of which Mr. Garrett Horder is the honorary secretary; and by the Incorporated Medical Practitioners' Association. The meetings held by these societies and the large mass of literature bearing on the question which they have circulated must have done much to enlighten the public as to the way the funds contributed to hospitals by charitable persons are wasted, but as far as reform is concerned nothing has been gained. In London abuses in connexion with out-patient departments appear to me to be more common now than at any previous time within my recollection. I have been associated with all the societies above-named and it is a great satisfaction to me to have reason to believe that our efforts to educate the public have to some extent been successful. The large falling off in subscriptions to hospitals in recent years and the difficulty—ever increasing—which the committees of hospitals have in meeting their expenses may fairly be accepted as evidence that public confidence in the administration of hospitals has been seriously shaken. The Charity Organisation Society deserves great credit for publishing a most instructive series of cases of hospital abuse collected from practitioners resident in different parts of London, the perusal of which should cause subscribers to take greater interest in the hospitals they support.

It will be in the recollection of many of you that in 1891 the British Medical Association appointed a special committee to inquire into the administration of medical charities. This committee has been reappointed annually, and during the whole period I have had the honour of being a member thereof. In conjunction with two or three other members I have repeatedly made personal visits to several of the larger metropolitan hospitals and to many special hospitals during the hours for seeing out-patients in order to ascertain what precautions are taken by the authorities to prevent the admission of unsuitable persons. At our first visit to the leading hospitals we found that it was quite exceptional for any steps to be taken to exclude well-to-do persons from the out-patient departments, and it was clear, from the dress and general appearance of the patients waiting in the out-patient rooms, that many of them were far removed from the class who could rightly demand gratuitous medical aid. The secretary of one of the hospitals when we called his attention to the well-to-do appearance of the patients said, by way of excuse, "If I were to exclude such people from the hospital I should soon have the surgeons after me with the inquiry, 'Where are all my well-dressed patients?'" This remark gives the key to solve the question why so much abuse of hospitals exists. The medical staff do not really desire medical reform, preferring, for reasons I need not discuss on the present occasion, to attend "well-dressed" patients rather than minister to the needs of the very poor. If hospital physicians and surgeons earnestly desire to check hospital abuse they have it in their power to do so at once without any help or pressure from general practitioners and hospital reform committees.

The Number of Hospital Patients.

In order that you may have some idea of the wholesale pauperisation of the population of the metropolis which is being effected by hospitals and dispensaries I have taken some figures from "Churchill's Medical Directory" for 1900, and I find that according to the returns published in that reliable publication upwards of 95,000 in-patients and about 1,950,000 out-patients were recipients of medical relief at the various metropolitan charities. These numbers do not include patients attended at the various fever hospitals, lying-in hospitals, and lunatic asylums, or the scores of thousands of paupers who claim, as a right, free medical attendance at the Poor-law infirmaries and dispensaries. Of course the figures which I have put before you respecting numbers treated as out-patients in hospitals and dispensaries are altogether misleading, but they are official, and I am not responsible for them. It is incredible that nearly one-half of the population of London should resort to hospitals in one year for medical relief, but we must remember that many patients go from hospital to hospital in the course of a year and figure on the returns issued by each institution visited, whilst in other cases the same patient is counted two or three times over in the same annual return. We may therefore, I think, fairly reduce the number of out-patients relieved by one-half. This would leave about 1,000,000 as the number of persons above the rank of pauper who receive charitable medical relief, partially or wholly, at metropolitan hospitals and dispensaries. Are we to be told that there is anything like this number of persons living in London who, not being paupers, can be classed as among the deserving poor, who are entitled to free or assisted medical relief? In my opinion, if we exclude *bonâ-fide* paupers, there are not the tenth part of a million persons residing in the metropolitan area who are unable to pay the fees of a private practitioner when sick. The thousands of pounds, therefore, spent in ministering to the needs of the remaining 900,000 out-patients might just as profitably be spent in paying the expenses of the members of the London Stock Exchange for a trip to Palestine and back by Cook's Tourist Service.

What is the Remedy?

It would weary you were I to occupy your time by going into details as to the injury done to the profession, especially to general practitioners, by the abuse of hospitals. But it is not only the general practitioner who suffers from loss of practice; consultants lose many fees through the facilities given to the public for obtaining their advice free of charge by means of the "open door" of the out-patient department. 20 years ago patients of the artisan class who paid the minimum fees for visits and medicines, if I suggested a consultation, would seldom hesitate about paying a fee of one or two guineas to a consultant; now it rarely happens that I can get a fee for a consultant even from patients who can pay 7*s.* 6*d.* or half a guinea per visit. They all say, Why should they pay a consultant's fee when they can get his advice for nothing at the hospital? One of my patients who in addition to a town residence keeps up a large country house surrounded by many acres of ornamental grounds has had his children attended at hospitals free of charge and no questions have been asked. If hospital physicians and surgeons could realise the injury done to themselves by the use of hospitals they would, I think, be more ready to help those who are working to bring about hospital reform. The abuse of hospitals and the injury thereby done to the public and the profession being admitted the question arises, What is the remedy? As a preliminary in solving this question we must try to determine the cause of the evil. Mr. Keetley in his address to which I have alluded says: "The money difficulties of hospitals, as well as the abuse of out-patient department, are to a great extent due to want of direct public interest in them. Their management drifts into the hands of cliques or of individuals often uninformed, lukewarm, and always practically irresponsible." He says that he knows of no London general hospital which is governed by the people who find the money, the time, and the skill to carry it on, and he suggests as a remedy that "a hospital should be governed by those who support it." I quite agree with my friend Mr. Keetley that this would be a remedy, but the difficulty is to get those who subscribe money to hospitals to give their time also in managing the institutions they subscribe to. In my opinion it is hopeless to expect them to do so. They have been appealed to again and again,

but without result. The only other persons who can be expected to take any steps to reform our public medical charities are the lay officials, treasurers, secretaries, &c., and the honorary medical officers. It is idle to expect any reforming action on the part of the lay officials; their interests are bound up in maintaining the present condition of things. On the other hand, the interests of the medical officers would be served by a well-devised scheme of hospital reform, and, personally, I am inclined to hold them responsible for the evils of the hospital system which exist. They have been deficient in courage and have failed to recognise their duty to the public, or reform would have been brought about long ago. That they have a right to a predominant voice in the control of hospitals must be conceded. Hospitals could not be carried on unless they gave their time and skill to the service, and the value of these in a large general hospital exceeds, as Mr. Keetley says, the total subscriptions and donations. Notwithstanding this the medical officers of a hospital have very little voice in the management. It is not given to them voluntarily, and Mr. Keetley despairingly says: "No staff can win its rightful position by force. ..... Whenever a lay committee and a staff, or an important section of a staff, fall out, it is always the medical men who have to go. The cruel thing about this is that at a certain time of life resignation of a hospital appointment may mean ruin to a medical man." That this should be so is a disgrace and a scandal and points to a sad want of brotherly feeling in the upper ranks of the profession. The evil which Mr. Keetley deplores would not exist were it not that when a hospital physician or surgeon is forced to resign, or is dismissed, there are half a dozen other consultants ready to take his post. In the medical profession, unfortunately, the saying that "dog will not eat dog" does not apply.

As hospital reform is not to be looked for from the subscribers to medical charities, the lay officials and committees of management, or the medical officers, we must turn elsewhere, and I am inclined, though somewhat reluctantly, to favour State control which is advocated by many worthy and well-informed hospital reformers. Certainly we might fairly ask the State to pass a law to stop free trade in founding and running hospitals. No one should be allowed to appeal to the public for funds for any medical charity unless with the sanction of the Home Secretary or some public authority, and no new hospital should be started unless the necessity for it in the public interest were fully established. There is, I think, but little doubt that the time is rapidly approaching when the public will demand more control over hospitals. There is a feeling among a section of the public, and it appears to be growing stronger, that hospital patients are at times used for experimental purposes. I am not prepared to say what grounds, if any, there are for such suspicions, but in the interests of medical and surgical science they should be dispelled, and this can only be done by instituting a more perfect system of hospital management in which both the lay and medical elements are fairly represented.

Mr. G. JACKSON (Plymouth) suggested bringing the question before the public subscribing to the hospitals.

Dr. BRASSEY BRIERLEY considered that the posts of hospital physicians and surgeons should be only held for a limited period.

Mr. GEORGE BROWN said that abuse arose from the anxiety of the hospital committees to publish as large a number as possible of patients treated as a bait to the public for subscriptions. They must look to some State control to prevent hospital abuse. He agreed that there should be some limit to the time for a physician or surgeon to hold his appointment.

Mr. F. H. TINKER (Hyde) moved the three following propositions, which were carried:—

That it is desirable to emphasise the fact that hospitals and infirmaries are charitable institutions and that all persons who receive treatment there are recipients of charity.

That it is desirable that the governing bodies of hospitals should decide upon a reasonable income limit and exclude from the benefits of the charity any person whose income exceeds this; but the operation of this clause shall be waived in cases of accident or acute illness involving urgent danger to life and in cases of severe operations.

That in cases of accident the attention at the hospital be limited strictly to first-aid unless the case be one of urgent danger to life or the patient come within the reasonable income limit.

The following motion was proposed by Mr. R. H. WOLSTENHOLME, seconded by Dr. WOODCOCK, and carried:—

That in the opinion of this Conference there is considerable abuse in connexion with medical charities and it is desirable that the profession should be adequately represented on the committees by which they are managed through their staffs.

Dr. DIXON proposed and Dr. MURPHY seconded the following motion, which was carried:—

That it is desirable that a visitor should be appointed at the various hospitals to inquire into the circumstances of patients applying for relief in order to prevent such abuse.

DEATH CERTIFICATION.

The following motion was proposed by Mr. J. S. WHITAKER, seconded by Dr. NASH, and carried:—

That it is desirable in the interests of the community to reform the system of death certification, so that in every case of death or still-birth it will be necessary to have the cause certified by a registered medical practitioner, failing which an inquiry must be held by the coroner.

FRIENDLY SOCIETIES.

The Conference then adjourned to the afternoon session, when Dr. COX (Gateshead) read a paper on "Friendly Society Work and the Proposed Conciliation Board."

Dr. GLOVER said that he hoped the Conference would see their way to give the idea of a Conciliation Board a trial. He entirely disagreed with Dr. Ritchie who approached the idea with distrust, thinking the advantages would be with the friendly societies. The Conciliation Board was a board to hear both sides and was really originated by Dr. W. Bruce of Dingwall at the General Medical Council. Everyone said that the wage-limit would not come before the Conciliation Board, but though the friendly societies say it is impossible for them to admit it, this did not preclude its discussion. The idea of not making it retrospective was admirable. The friendly societies urged that the proper remedy was public opinion. The Council of the British Medical Association had asked him, as chairman of the committee of the General Medical Council, to arrange for a joint meeting between the committee of the British Medical Association and the committee of the General Medical Council, and this event was to take place on May 22nd. The question, therefore, was quite alive. Any general conclusions that might be reached by a central board would have to be elastic enough to admit of its application to local institutions. The General Medical Council would not sanction any of its members being on the Conciliation Board. If the profession refused to discuss the question then they would put themselves in a wrong position.

Dr. RATCLIFF-GAYLARD (Manchester) moved the following proposition, which raised a heated discussion, and was defeated by 19 votes to 17:—

That it is desirable that those who have the carrying out of the provisions of the Vaccination Act should perform their duties in such a way as not to trench upon the interests of general practitioners, and that instructions to this effect be issued to public vaccinators.

Dr. ALEXANDER STEWART (Manchester) read a paper on "Provident Dispensaries," and Mr. G. JACKSON (Plymouth) read one also on the same subject.

Dr. DIXON proposed and Mr. E. E. BOWDEN seconded—

That in the opinion of this Conference there should be in contract practice a minimum rate of 5s. per member per annum, and further, this Conference condemns the practice of canvassing in connexion with medical clubs.

This initiated a lively debate, the result being that the following motion was declared to be carried:—

That in the opinion of this Conference there should be in club practice a minimum rate of 5s. per adult healthy male members per annum; that contract work should in all cases be distributed among all medical practitioners in the town or district who are prepared to undertake such work; and further this Conference, whilst condemning the practice of canvassing any connexion with medical clubs, strongly insists upon the necessity of an income limit being made part of the contract.

The Conference then adjourned.

On Thursday, May 3rd, Dr. Glover addressed the Conference, taking as his subject

"SOME DEBATED POINTS IN MEDICAL POLITICS."

He said:—

GENTLEMEN,—The subject of my address to-night is "Debated Points in Medical Politics." I am sure you will all agree with me that I am safe in classing the Midwives Bill in this category.

The Midwives Bill.

I have never concealed my opinions on this subject, and I was a little surprised to find one of my critics—who, no doubt,

meant to be quite fair—suggest that I observed a discreet silence at the Newcastle meeting. It was not the main theme of my address then: I was not challenged on the subject. One of my friends there who very honestly differs from me, said: "We all know Dr. Glover's opinions on this matter; he has been consistent throughout and we know exactly what he will do." Nevertheless, I did even on that occasion express my concurrence with Mr. Horsley's views on the subject. This afternoon I shall, with your permission, devote the most of my time to it, because in its present position it is a question of great public and professional interest; because it is a difficult one and one on which opinions may fairly differ; and, lastly, because I honestly believe that half the difference of opinion which exists would be removed if the subject were studied from all sides and in all its bearings. Without further introduction I shall plunge into the middle of the question. I ask opponents to bear with me and to answer my points, and I ask friends to indicate to me either now or in writing any weak points in my argument, and I promise them my best consideration.

Mistakes of Opponents of the Bill.

I think the great mistake which the keen opponents of this legislation make is in being unpractical and in not taking the actual state of things into account. They seem to forget the actual facts of the case. Now, what are the facts?

First, that midwives exist and that they attend, on a low estimate, 200,000 cases. They are employed not only directly by the poor, but by parish authorities and by maternity charities.

Secondly, that the title "midwife" exists and is recognised by law and can be taken by any woman and used for making a living. Nothing in the Medical Acts, not even the famous fortieth clause, is violated by the title or the practice of the midwife.

Thirdly, that any woman, however drunken, or ignorant, or dirty, may without hindrance use this title and under its name may infect lying-in women wholesale, may allow an arm to protrude from the vagina for 12 hours, or the bleeding of an uncontracted uterus or a placenta prævia to go on till the life of the patient is imperilled or lost. The opponents of legislation must see that this state of matters can scarcely be left alone. It must be ended or it must be mended. They misrepresent the advocates of legislation altogether—no doubt unintentionally, but not the less really—when they say that a Bill to regulate midwives creates a new set of practitioners. Midwives exist already; the untrained among them are a recognised and terrible danger to the life of lying-in women; and those who reject midwives Bills altogether are bound to find some other remedy for the tragedies that we know happen. But I shall be told that the opponents have suggested remedies. Let us see what they are.

1. To abolish the midwife, trained or untrained.
2. To abolish the title of "midwife."
3. To have all lying-in women attended by medical men.

"Doctors can be had to attend confinements, it is said, for 5*s*. 6*d*. and upwards!" I must be allowed to say that in my opinion no more unsafe, undignified, unsound, misleading statement was ever made or could be made by an enemy of the profession than this statement. Yet it is made by one who poses as the leader of the opposition, who was placed at the head of the poll for his opposition, and who no sooner got into the General Medical Council than he got out of it, chiefly on the question of fees, without ever waiting to fight the battle he was sent to fight or to convert the Council to his own views.

Other opponents, who have too much knowledge and respect for the profession to make such statements, say, "Let all the women attended by midwives be attended by the parish doctor." Have the gentlemen who make such a suggestion as that ever considered how they were going to carry it out? It could only be done by an Act of Parliament, and Parliament would take till the year 2000 before it enacted the pauperisation of every woman now employing a midwife and abolished the title of midwife which exists in all countries and has existed in all ages.

I claim, gentlemen, to have shown, at any rate I believe—and all my reasonable opponents will give me credit for holding my opinions honestly and consistently and for having given reasons for the opinions I hold—that the other remedies for the existing order of "Gamps" are unpractical or are founded on misleading statements. I think I am entitled at this stage to ask a question and to press for an answer. When did the recognition of the midwife by the medical man—of her existence, her title, her uses—become such a crime as it appears to be now? The chief advocates in the General Medical Council for legislation to secure some training and some character in midwives were the late Dr. Stokes of Dublin and Dr. (now Sir Henry) Acland—than whom two more eminent men or high-minded representatives of the profession it would be difficult to find. But let us come down to the present moment and the rank-and-file of the profession and take instances of their coöperation with the midwife. It is universal. I never heard of a medical man refusing to meet a midwife as such. I shall quote three illustrations.

1. In London the parish midwifery is done chiefly by midwives. If the midwife is in any difficulty she refers to the parish medical officer and he attends on her call and with her in the future course of the case. I never heard of a parish medical officer refusing to do this or being summoned before the General Medical Council for doing something discreditable. But perhaps it may be said this is law; they cannot help themselves; they are legal officers acting under contracts.

2. My second illustration is in the Royal Maternity Charity which was established in 1757. Its consulting physician is Dr. Robert Barnes. It has 46 district surgeons and 35 midwives.

3. My third illustration I find in the 149th annual report of the City of London Lying-in Hospital.

The out-patient department is worked by a consulting physician, Dr. Clement Godson, and 11 district surgeons, some of them esteemed neighbours of my own, with names that may be known to some of you—viz., Mr. Arthur W. Galloway, Dr. Major Greenwood, Jun., Dr. Chambers, Mr. Hope Grant, Mr. W. F. Blyth, Dr. P. W. Dove, Mr. H. E. Whitehead, Mr. W. Campbell McDonnell, Mr. F. H. Oliver, Dr. C. E. M. Kelly, and Mr. C. Beauchamp Hall. There are eight midwives—trained, of course. They attend the cases and send for the district surgeon. I want to know what sin these gentlemen commit in accepting such an office, involving the recognition of, and coöperation with, midwives holding for the most part certificates from the Obstetrical Society? If this recognition and coöperation, which have existed 150 years and have survived the Act of 1886, are in unquestioned force to this day where is the inconsistency or the crime of approving legislation the essence of which is to provide for the classes who are independent enough to employ midwives on their own account the same security for training which you have in the midwives of these charities and the same assistance, when needed, from the medical profession? And I want to know, further, if when gentlemen clamour to have the representatives of the Obstetrical Society found guilty of infamous conduct in a professional respect for examining and certifying midwives as midwives they will be prepared to go further and demand to have the same verdict brought in with its terrible consequences against the 11 gentlemen I have named on the staff of the City of London Lying-in Hospital and against Dr. Robert Barnes for his countenance of the Royal Maternity Charity? Gentlemen, I claim to have shown that such a view of the midwife as is now forced upon us week after week by a few energetic opponents of the Midwives Bill is a reversal of the attitude of the profession on the subject and one which brings us into a very serious position. We must either do very cheap midwifery ourselves or let midwives do it. We cannot assume a dog-in-the-manger position without bringing on the profession a great responsibility. Opposition to all legislation on midwives means the continuance of the old midwife, untrained, untidy, with no sense of puerperal hygiene, and all the dismal consequences to lying-in women of such an attendant. These consequences are so obvious, they are so frequently illustrated in coroners' inquests, that something must be done. Things cannot remain as they are. Public and Parliamentary opinion is too decided in favour of legislation for that. The profession has two alternatives before it and I beg the attention of my friends who differ from me to this point. You cannot leave things as they are. Legislation will be undertaken. The medical profession cannot, if it would, avert legislation; it can largely control it.

Two Alternatives before the Profession.

This brings me to the present situation and the actual choice between the only two alternatives, as it seems to me, which are before the profession. The irreconcileable opponents do not always put forth their real objection—

which is to the principle of all such Bills, to all proposals for dealing legislatively with midwives. But they say, at any rate, and particularly, we object to *this* Bill. Now, gentlemen, this objection has been made to every Bill that has ever been produced. It will easily be understood that such a position cannot be indefinitely kept up against a measure in regard to which there is a strong favourable feeling in Parliament and in the public mind. The real alternatives, as I now propose to show, are between this Bill and something worse.

The Two Alternatives.

I maintain that the General Medical Council and the Direct Representatives who are giving a conditional support to this Bill know what they are doing and that they are doing the best thing in the nature of the case. They are insisting on certain points being observed in such legislation, of which I would point out three or four.

First, that the *practice* of the "Gamps," subject to the life-interest of those already in practice (and that conditional on evidence of good character), shall cease.

Second, that the practice of the new midwife shall be subject to limitation and regulation, to be superseded or supervised whenever the cases become unusual or irregular; whenever emergency arises in mother or child. This is the traditional condition of all midwives' work sanctioned by the profession, and it is proved to be safe and satisfactory for lying-in women. I shall prove that if anybody doubts it or challenges me to do so. I may here once for all meet a question which is often put—I think not very reasonably—by those who object to the Midwives Bill. The question is this: "Would you like a friend of yours to be attended by one of these midwives with three months' training?" Certainly so, I answer, in preference to one with no training at all. That is the alternative of those who are attended by midwives.

Third, that the influence and opinion of the medical profession shall be felt and shall be predominant in the framing of the rules which are to regulate the practice of midwives and in the administration of the discipline of those who violate these rules. This is provided for in the Bill first, by the predominance of medical men in the constitution of the Midwives Board, and, secondly, by clauses which require that the rules framed by the Midwives Board shall be subject to the approval of the General Medical Council—rules, that is, for the training of midwives and for regulating, supervising, and restricting within due limits their practice; for deciding the conditions under which midwives may be suspended from practice; for deciding upon the removal of the name of any midwife from the roll of midwives; and for disobeying the rules and regulations laid down under the Bill by the Central Midwives Board or for other misconduct, &c.

The consideration of the rules of the Midwives Board by the General Medical Council will, of course, involve some demand on the Council's time. The General Medical Council has stipulated that the cost of this time shall not fall on the Council's funds provided by medical men, but shall be met by the State. Such, then, are the principal conditions insisted upon by the General Medical Council on the various occasions on which it has been invited by the Government to consider the provisions of this Bill. And I should be scarcely candid if I did not take this opportunity of expressing my sense of the respect shown in this matter by the Government to the General Medical Council and through it to the medical profession. I say that the acceptance of legislation on these lines, and with these safeguards, is now open to the medical profession. This is one of the two alternatives which it has to choose.

There is another alternative to which I beg the earnest attention of my hearers and of the profession. The irreconcilables of the profession may possibly defeat this Bill. The rules of the House of Commons lend themselves easily to such a sort of success and, even now, in the crowded life of this memorable session it might be possible to find ways of blocking or imperilling the Bill. I do not think it is at all likely. But in any case such tactics will not long or permanently prevail. Even if the gentlemen who object to this legislation had all their own way; if they could return Direct Representatives entirely of their way of thinking on this matter, I venture to say they will not have achieved their object. We have had a rude reminder lately that even in medical questions before Parliament the medical profession cannot have all its own way. And I ask the profession to believe that the real alternative to which the Government may be driven by mere blind resistance to this kind of legislation, such as we have seen in the last few years, may be to give us a very much worse Bill than that we have now before us and which promises a real end to the dangerous midwife. It may be driven to say: "If the Medical Council does not represent the medical profession, if the profession is really represented by those who resist every Bill likely to remove a grave evil with the least risk to medical art and to the medical profession, then we must settle this question without their assistance and without their coöperation and create a perfectly independent class of midwives who shall lay down their own rules and carry out their own discipline."

This seems to me the real alternative to which such blank opposition as we have seen to this Bill exposes the profession. I cannot doubt that when the profession looks at the subject—not from a balloon and another world as some of our friends seem to do, but in the light of actual facts—it will see the real alternatives which are before it and will accept the Bill containing the safeguards I have mentioned, will endorse the action of the General Medical Council, and I believe it will say that the Direct Representatives who have faced the difficulties of the question and secured conditions which alone make the midwife safe have acted wisely and have done right. I believe it will clearly see that Parliament is bent on dealing with this question somehow and will prefer to take a Bill which gives the profession control over midwives to one which leaves them independent.

The issues raised by this question are not those of mere election position—whether I am to be at the head of the poll or at the foot of the poll—as some of my critics seem to think. I have had experience of both positions and I am entirely willing to leave such results, and even my exclusion from the poll altogether, to the broad and fair judgment of my fellow-practitioners. Far different and far more important are the issues than any personal details of the sort. The real question is whether, when a question of this sort has to be faced and settled by Parliament, Parliament shall receive the practical help of the profession in that spirit of level-headedness and educated common-sense which it has always displayed and which causes it to be consulted by successive Governments. We are largely dependent on the goodwill and the good opinion of Parliament. The profession has much yet to ask from it—and rightly to ask—including an extension of Direct Representation. I believe our leading statesmen were never more appreciative of our art and science and profession than they are to-day, and I should regard it as a misfortune if in this matter the profession showed itself unhelpful by being unpractical. And I should regret it the more as the whole responsibility and discredit of that attitude would fall on Direct Representation. I shall be no party to such an attitude, and in trying to put this inevitable legislation into the best form I am convinced that I shall best serve the interests of the profession as well as of lying-in women.

THE WAR IN SOUTH AFRICA.

THERE is but little of real importance to be chronicled regarding the progress of the war; at least, such appears to us to be the case. The efforts that were being made last week not only to relieve Wepener but also to capture the Boer forces engaged in its investment have proved futile as far as the latter object is concerned. The Boers were not going to be caught in a *cul-de-sac* and they very skilfully made off at the right moment. The greater portion of De Wet's and Olivier's commandoes have evaded pursuit and have apparently rejoined their main army at Brandfort and Kroonstad. The retreat of the Boers has, no doubt, had the effect of clearing the right flank of Lord Roberts's force of their presence, but the result is nevertheless very disappointing. The fate of Mafeking still hangs in the balance and naturally causes much anxiety, for its immediate relief seems to be no nearer than it was (indeed, it is stated that Lord Roberts has asked Colonel Baden-Powell to hold out until May 18th), while its limit and power of holding out are daily decreasing. The surrender of the garrison of Mafeking after their long-sustained heroic

defence would be very keenly felt by the nation which has followed the history of the siege with sympathetic interest and admiration. Among the war incidents in our favour must be reckoned the recent explosion at the arsenal at Pretoria, but we do not know whether this involved the total destruction of all the plant or not or to what extent the damage is reparable so far as the arsenal as a manufactory of the munitions of war—of shot and shell—is concerned.

It was firmly believed some weeks ago at Bloemfontein that no advance was expected to take place before May. That month has arrived now, and there is every reason to believe that it must soon occur. Lord Roberts's move will presumably be the signal for Sir Redvers Buller's force to coöperate in the advance. Various estimates are given as to the strength of the Boer forces that are available to oppose us, but it is of little use speculating on the subject, for this has been throughout a war of surprises from its initial stage to the present moment.

The total British casualties, according to a War Office return published on April 25th, reported from the beginning of the war up to April 21st were as follows: killed in action, 213 officers and 2015 men; died of wounds, 50 officers and 483 men; missing and prisoners (excluding those found at Bloemfontein, but including missing men of Royal Irish Fusiliers, now reported as 496), 173 officers and 3785 men; died of disease, 56 officers and 1853 men; accidental deaths, 3 officers and 44 men; sent home as invalids, 347 officers and 5802 men; total, 842 officers and 13,982 men. Total losses (exclusive of sick and wounded men now in British hospitals in South Africa), 14,824.

There must be a large number of sick and wounded men at present in our hospitals, for there have been several recent encounters with the enemy and the sickness (notably from enteric fever and dysentery) is mounting up; still, the ratio on the total strength is not a large one. This reminds us that it is exceedingly difficult at the present time to form any estimate of the protective value of inoculation for enteric fever. According to the experience and opinion of some it is of little or no value as a safeguard against that disease, but Sir William Mac Cormac is probably right when he says that it is premature to form any opinion until we have sufficient statistical data to afford a comparison between the inoculated and non-inoculated in respect of their susceptibility to attack and as to any modification or not of the course of the fever observed in those who have been attacked after having been inoculated.

Dr. E. Symes Thompson, Gresham Professor of Medicine, has been recently delivering some lectures at the Gresham College on "Military Ambulance Work" which are interesting and instructive in their way, in that they trace out the history of the subject up to and including the present war, with the lecturer's comments and practical conclusions regarding the methods and procedures followed in South Africa, together with some of the statistical results obtained; but we cannot say that they add much to the practical knowledge of those who have given their attention to the subject of the medical aspects of modern warfare. The present war has, as might have been anticipated, added greatly to our knowledge and altogether changed or greatly modified many of our views in various directions, but the time has not yet come for harvesting the information or formulating the results. Great changes will be brought about by our present experience, and among these we may reckon that not only will the regular army medical service have to be increased and developed, but, still more, that the organisation of a medical reserve on a large scale will have to follow. We must always have a thoroughly well-trained and well-equipped Royal Army Medical Corps as the backbone of the medical service, but considering all the increased requirements of modern war and the enormous forces brought into the field it will, for financial reasons, be impossible as well as, for other reasons, inexpedient, to maintain a permanent service on an adequate scale to the exceptional needs of war, and we shall therefore have to provide a large reserve medical force on which to fall back in order to meet these when the occasion occurs.

A large number of civil surgeons have been employed in the war hospitals of South Africa, our different Red Cross societies, the colonies, and private benevolence have established fully equipped hospitals there and have sent out hospital ships, the Government provision of medical officers and material has been largely supplemented from various sources, and eminent hospital surgeons have acted as consultants, so that a great deal of experience has been gained in the present war in the way of finding out the medical organisation and administration best adapted to secure the most useful and harmonious action of all in pursuit of a common object. All this will obviously hereafter be turned to account.

IMPERIAL YEOMANRY HOSPITAL.

BY ALFRED D. FRIPP, F.R.C.S. ENG.

OUR hospital is making most excellent progress towards completion. The wards, consisting of course of huts and tents, are arranged in three divisions under Mr. Raymond Johnson and myself (for surgical cases), and Dr. Washbourn (for medical cases). Three medical men are associated with each surgeon and five with the physician, and five dressers are attached to each surgical division. Eventually there will be three times 58 beds, which equals 174 in each division. To each 58 beds there are two day sisters and one night sister; thus there are 18 sisters on day duty and nine on night, and this leaves six extra sisters on day and three on night duty to be told off by the superintendent to whichever wards are temporarily overworked. Miss Fisher (the superintendent), Miss Brereton (the operating theatre sister), and Miss Stevenson (the night sister), complete our total of 39 nursing sisters. In the middle of the hospital is a cross-shaped building. The two operating theatres, one of which is devoted, except in times of stress, to the dental surgeon, form the cross-piece. The short head limb of the cross, separated by a roofed-in lobby from the operating theatres, is occupied by Miss Brereton who presides over all surgical instruments and dressings and other paraphernalia. The long limb of the cross, similarly separated from the operating theatres by a lobby, is occupied as to the end nearest to the operating theatre by the x-ray department and as to the foot of the cross by the dispensary. The x-ray room opens by a four-foot doorway into each operating theatre and another four-foot doorway in the opposite side of each operating theatre renders it very easy for the patients to be carried on a stretcher or even in a bed from the wards into the theatre or into the x-ray room for photographic purposes. The photographic dark room is placed in the furthermost corner of the dispensary, so that the plates there stored, of which we have a valuable stock, should not be spoilt by the proximity of the x-ray apparatus. We are singularly well equipped with this apparatus and already it has been of great service to us in the diagnosis and treatment of several cases. Our other special departments are in great demand, especially the dental department, for whose assistance we have had to cable to England for two extra men to work under Mr. F. Newland-Pedley. Our masseur, too, is of the greatest use. He does 30 cases every day and he is getting some really excellent results, even in some cases which looked at first sight as if they could not get well without operation.

The land occupied by the hospital is a narrow strip some 100 yards wide between the railway line and a long kopje. The medical staff and the orderlies sleep on the other side of the railway line. The nurses' quarters are at one end of the hospital grounds and the officers' mess and commandant's office at the other end close to the railway-station. We now have water-pipes laid down throughout the grounds and fed from the tank at the railway-station. There are four kitchens, one for the officers' mess, one for the hospital, one for the nurses and maids, and one for the orderlies. We have, of course, plenty of provisions in the storehouse, but the supply of fresh milk and eggs, for which we have to rely on the few farmers round about, is very scanty and also very variable, and as to poultry, fresh vegetables, fruit, and such like, they are absolutely unobtainable. Bread, ice, and beer we draw from the Army Service Corps at De Aar. The meat comes up from Cape Town and very bad it is. The hospital huts are just as good as they can possibly be. They are substantial, rain-proof, and comfortable. The tortoise tents, which take from eight to 11 beds, and the bell tents, which have four beds each, are also completely successful, but the hospital marquees of the old type are quite useless for sleeping purposes and are all requisitioned for mess-rooms, officers', recreation rooms, and so on. They frequently blow down altogether, for there are only three or four inches of soil before the tent-pegs come upon solid rock, and the South African rain comes through them about as easily as if they were made of muslin. We had to sleep in them at first, and

if it was raining the only safe thing was to pull a tarpaulin completely over your bed or to rig up an umbrella over your head. It really looked most odd.

As to the patients they comprise instances of pretty nearly every wound which has already been recorded in the medical papers. There are the same marvellous escapes which have struck every observer in this war. Men shot through the head and through the trunk in such a way that one would have thought the vital parts must be injured, are frequently seen with no symptom whatever remaining, only the two little marks where the bullet went in and out. The entrance wound often presents no worse an appearance than an ordinary flea-bite. The exit wound is, of course, naturally larger, especially if any bone has been struck or splintered, for then the small fragments give to the subsequent track of the bullet an appearance as if an explosive missile had been used. On the medical side typhoid fever, dysentery, and heat-strokes provide nearly all the cases.

With regard to tobacco, cake tobacco of a good but very powerful nature, such as is always sold to soldiers on active service, we can obtain in any quantity from the Army Service Corps at De Aar, but only the robust Tommy Atkins can smoke this. When he is not robust, as is frequently the case in hospital, and when he is not Tommy Atkins, as is frequently the case in the C.I.V.'s and Yeomanry, of whom we have a good many, then something milder, some of the packet tobaccos of commerce, is wanted, and these we have to buy at considerable expense in Cape Town. Similarly every man coming down from the front is pipeless—every pipe has been either lost, broken, or burnt out. We shall want quite two gross a week when our hospital is fully opened. Cigarettes, too, are in great demand. A patient is generally longing for their lighter attractions some days before a pipe has any allurement for him. I very much hope that some of our friends in England will arrange to send out some of these pipes, packet tobaccos, and cigarettes of any brand. It is undoubtedly cheaper to get them in that way because any firm of tobacconists could arrange to send them "in bond" and *duty free* when destined for troops on active service or in hospitals, and we have no funds available for the purpose, for of course such luxuries could hardly be charged to the hospital account for maintenance.

Our medical staff is producing a newspaper printed through the medium of a typewriter. The first number is just out and is really very amusing. It caused quite an excitement in the camp. Last night we had an open-air concert. Miss Fisher (the superintendent), and two of her nursing sisters, Mr. Rupert Guinness of the Irish Hospital, who was paying us a 24 hours' visit, and the clergyman (who, in default of our own chaplain, who is on the sick-list, had come over for the day and had held two services), were invited to the officers' mess for dinner at 7 o'clock. Then we all joined the throng around the piano on the central stage lit with hanging lanterns. Our own orderlies and patients, and the local guard of 50 men and the nursing sisters, must have made up an audience of well over 200, and from 8 o'clock to 10.30 we all very much enjoyed the really excellent performance. It was a lovely night. There is a great deal of "talent" among all branches, including the sisters, officers, orderlies, patients, and guard.

Another batch of patients, entirely composed of Yeomanry and C.I.V.'s, arrived to-day, collected from various parts of the Cape Colony. We are so pleased that the authorities have evidently appreciated our whereabouts and our desire to get hold of as many as possible of these two volunteer branches of the service. Difficult eye and jaw cases have again come in to-day and, as I have said before, it always gives me particular pleasure when our specialists in these departments are resorted to.

All the work of the hospital is beginning to run in its proper grooves now and of course this will be very much easier when all the huts are erected and the staff told off to their permanent daily duties. While we are in a stage of growth the constant changing of sisters from hut to hut, and of the corresponding duties of the medical officers similarly, cannot be avoided and gives rise to more than a little difficulty, for the sisters and doctors hardly know one another yet, and certainly neither of them know any of the orderlies except the particular one or two by whom each has hitherto been served. The stores are nothing like all unpacked yet—some of them have not arrived. Those which are unpacked have not yet been methodically arranged in the storehouse, so that we are still higgledy piggledy in many respects. However, under the circumstances of time and place, and transport and weather, and deficiency of labour, now that most of the orderlies are occupied in the wards, I do not think that anything could possibly be going better than the Imperial Yeomanry Hospital is going.

Deelfontein, Cape Colony, April 2nd.

WITH THE IMPERIAL YEOMANRY HOSPITAL.

(FROM A SPECIAL CORRESPONDENT.)

THE ENCAMPMENT AT DEELFONTEIN.

DEELFONTEIN itself is a most salubrious spot. It has an elvation of over 4000 feet above the sea level; its air is pure and warm, and there is generally a gentle breeze which prevents the heat becoming oppressive. Its water-supply is abundant and of excellent quality. Recovery from both sickness and wounds is remarkably rapid. There are considerable differences of temperature during the 24 hours, for while it is often 90° F. in the shade during the daytime the temperature during the night falls very low and very heavy dews are the result.

It is now the rainy season and several very heavy rainfalls have occurred since the hospital arrived here. Tents are still very largely in use, and woe betide any tent dweller who has neglected to dig a trench round his tent, for in that case during a storm he will probably find the floor of his tent covered with water an inch deep in places. The winter is coming on, May and June being the two coldest months here. It is a common occurrence then for the water in one's tent to be frozen during the night.

A storm of rain is invariably preceded by a stiff breeze, which severely tries the stability of all the tents. Although no actual sandstorm has passed over the encampment this breeze carries along with it an immense quantity of the finest sand, which has a marvellous penetrating power. It enters one's boxes and bags by the tiniest crevices, it gets into one's watch and locks, it seems to saturate one's clothes, and everything is smothered with it. One can write one's name on the tablecloths and the white sugar resembles moist brown Demarara sugar owing to its admixture with sand. It get's into one's nostrils and irritates the naso-pharynx and gives one a sore-throat, which is often accompanied by headache and pyrexia. It irritates one's eyes and grits between one's teeth. Sometimes diarrhœa seems to be a result of the sand that is unavoidably taken with one's food. Another irritating circumstance is that the sand that settles on one's face blunts the sharpest razor and makes shaving a nuisance.

Locusts and lizards are very plentiful here and they can be seen moving about just outside one's tent. A cloud of locusts passed over the encampment a week after our arrival in sufficient numbers to darken the sky and obscure the sun whilst they passed. There are four common species of poisonous snakes found in the locality. The puff adder is one of the most poisonous, but owing to its slow movements and the fact that it only bites by throwing its head backwards it is the easiest to escape from, as one can readily keep in front of it and so prevent it biting. Several snakes have been killed within the confines of the encampment. The number of flies here is enormous and their presence almost amounts to a plague. Their perseverance and persistence in returning repeatedly to the end of one's nose are worthy of a better cause.

The hospital encampment is divided into two unequal portions by the railway line from Cape Town. To the northern side of the line the tents for Dr. Washbourn and the medical officers are pitched and also those for the orderlies. The tents for the medical officers are small green tortoise ones and are protected by an awning which is most valuable in keeping out the heat and rain. In the larger ones two officers sleep together. The orderlies sleep in bell tents, six being quartered in each tent.

On the southern side of the line are situated the huts and tents for the patients, the commandant's office, the tent for Mr. and Mrs. Fripp whose portable house is not yet erected, the mess tents, the kitchens, the stores, and the nurses' quarters. The commandant's office is in a cottage of three rooms, one of which Colonel Sloggett, R.A.M.C., uses as his bedroom.

The medical officers' mess tent is a large marquee which is capable of seating from 90 to 100 people. All officers who are among the patients take their meals with them in the mess tent. About 40 sit down to dinner every night and

Colonel Sloggett is a most popular president of the mess. Attached to the mess tent is a large recreation tent which can be entered directly from the mess tent and which serves as a smoking-room and for concerts after dinner. Twice a week there is a guest night and members of the nursing staff are invited to dine with the medical officers. Mr. and Mrs. Murray Guthrie and Lord Iveagh's son have stayed here.

The hospital huts are corrugated iron buildings lined with wood. They are sent in sections from Cape Town and have only to be fastened together with iron bolts. Some larger huts capable of holding 34 patients have been brought out from England. All the huts are provided with wooden flooring and the site is carefully levelled before the hut is erected. Messrs. Peterson of Johannesburg are in charge of the erection of the huts. Kaffir and Hottentot labour is employed and a wagon and team of oxen are used for moving the stores, &c., from the trains to the camp. A railway siding has been constructed which leads from the station right into the encampment and saves an immense amount of labour.

Each hospital hut accommodates 20 patients comfortably and on emergency four more beds could be squeezed in. Iron bedsteads are provided for the patients in all the huts and larger tents, with mattresses, pillows, blankets, and sheets, which are a great luxury to most of the men, who for weeks have been compelled to sleep out in the open without any tent and with only one blanket to cover them. Tables and chairs are freely distributed between the beds and each man has his own eating utensils and a brush and comb. A flannel nightshirt or suit of pyjamas is given to each patient. Glass windows with wooden shutters are arranged on both sides of the huts for lighting and ventilation purposes.

The more severe cases are housed in the huts, whilst the patients who are recovering are put into tortoise tents and the convalescents sleep in bell tents. The tortoise tents are of two sizes, accommodating eight and ten patients respectively. Their furniture is practically the same as that of the huts, with the exception that sheets are dispensed with and the patients are closer together. The patients take a great interest in their tents and adorn the front of them with gardens in which they plant flowers found on the veldt and in which various mottoes are designed with whitewashed stones.

In each bell tent four convalescent patients sleep on trestle beds, and as they are up all day there is plenty of room for them. These tents are provided with little furniture.

The diet of the patients is excellent and is the same as that of the medical officers. Army regulation diet-sheets are used, in which plain milk diet represents three pints of milk daily, and milk diet consists of milk, bread, butter, puddings, and porridge. The convalescent diet includes meat (one pound), potatoes and fresh vegetables, cheese, &c. Most of the convalescent patients receive a bottle of stout per diem. These diets can be supplemented by the addition of such luxuries as custard, eggs, champagne or other wine, and fruit. Eggs are scarce and cost 7*s.* 6*d.* per dozen.

The amusements of the patients and camp are in the able hands of Mr. William Turner. An excellent golf course of seven holes has been marked out on the sandy bed of a dried-up dam of water, the only objection to it being that after heavy rains it is submerged. Cricket, quoits, and football are also possible. Daily papers are received each day from Cape Town and are distributed to the patients, as well as the illustrated papers and newspapers from England. Horses and a mule cart with a pair of mules can be hired from the general stores and riding and driving are thus provided for those who feel inclined for such exercise. A most excellent open-air concert was given recently, lasting for over two hours, at which the orderlies, assisted by the medical men and nurses, afforded a most amusing entertainment for the patients and for all who attended it. It was such a success that it is intended that it shall be a weekly occurrence.

The hospital is divided into three divisions under the leadership of Mr. Fripp, Mr. Raymond Johnson, and Dr. Washbourn respectively. In Mr. Fripp's division are Mr. W. Turner, Mr. Parkes, and Dr. H. W. Bruce, whilst Mr. Raymond Johnson is assisted by Mr. H. A. Ballance, Dr. J. B. Christopherson, and Mr. W. C. G. Ashdowne. In Dr. Washbourn's division Dr. H. W. Saunders, Dr. A. Elliot, Dr. L. E. C. Handson, Dr. R. T. FitzHugh, and Dr. G. E. Richmond are appointed. Each qualified man has from 30 to 40 beds allotted to him and is responsible for the treatment of these cases.

Three special departments are represented: by Mr. L. V. Cargill for diseases of the eye; by Mr. Newland-Pedley for dentistry and injuries to the mouth; and by Mr. Hall-Edwards for x-ray work and photography. The eye department of the hospital is most fully equipped and Mr. Cargill is able to operate on, or treat, any case of injury or disease of the eye as completely and efficiently as he could if he were in London. He has even brought with him an electro-magnet for use in the extraction of any fragments of shell which may lodge in a patient's eye. He has also with him all lenses and appliances for testing vision or ordering a pair of spectacles. One of his patients, an officer who was wounded at Paardeberg, was the first patient who entered the hospital. He was scouting with a small company of men and got within 15 yards' range of the Boers. Both parties took shelter behind boulders and then bobbed up and fired and immediately returned to cover. As soon as a man showed himself five or six bullets were fired, splashing on the rocks around. Lord Methuen telegraphed for Mr. Cargill and he went *viâ* Kimberley to Boshof to fetch the patient—through the enemy's country in a cart at night during the latter stages of his journey—and brought him to the hospital. The drive from Kimberley to Boshof was performed under cover of darkness and an unfrequented road was chosen. Boers were encamped on the top of the kopjes, but no shots were fired. In the middle of the night they were compelled to outspan, and on reharnessing the horses refused to continue their journey, so the ruse was adopted of going back for half a mile towards Kimberley and then turning their heads round towards Boshof. The right eye of the patient was quite hopelessly lost and contained two foreign bodies which were found by the x rays before enucleation was performed. His left eye was also contused by another fragment which lodged in the eyelid and for an hour he was totally blind and was taken prisoner two hours afterwards by a party of Boers, but was afterwards given up to Lord Methuen. He is now doing well and the stump is quite healed. About a dozen cases of diseases of, or injury to, the eye have been treated.

The x-ray department has already been of considerable service in the experienced hands of Mr. Hall-Edwards. It is most fully provided with both x-ray and photographic apparatus. A complete field outfit of Mr. Hall-Edwards's own design has been given for taking x-ray photos on the field if necessary, as well as a magnificent coil with a 15-inch spark on a moveable table for general work in the wards, together with accumulators and a dynamo for recharging them, which will be worked by hand. There is also a Mackenzie Davidson's localising apparatus. The photographic outfit is very complete, consisting of a large stock of plates and four cameras, including one stereoscopic camera which will allow of a complete pictorial record of the hospital and its patients being kept. There is also a convenient dark room with water laid on. Mr. Hall-Edwards has under his care all apparatus for electric light and for telephone communication in the camp.

The surgical divisions of the hospital are most fully provided with instruments and surgical dressings. A part of one of the huts has been set apart as an operating theatre, which is admirably arranged for performing operations on the most approved aseptic principles. An excellent operating table has been brought from England, and there is every convenience for the surgeon to sterilise his hands and instruments before operating. Mackintoshes and sterilised holland overalls soaked in lysol for 24 hours are worn during an operation, whilst sterilised towels soaked also in lysol are arranged around the wound so as to give an aseptic field upon which instruments and sponges can be placed without fear of infection. In fact, an operation can be performed here with all the advantages of a large London hospital. A steriliser for dressings and wood-wool sponges is in working order and the soiled dressings can be at once destroyed in the destructor. Lysol, carbolic acid, and perchloride of mercury are used as antiseptic lotions; iodoform, sal alembroth, and cyanide gauze are the principal antiseptic gauzes in request; and the usual antiseptic wools are provided in plenty. Every instrument, many of which are in duplicate, which could possibly be required in the commoner surgical operations has been brought here from England. The instruments and the operating theatre are in the charge of Sister Brereton as theatre sister.

About a dozen operations have already been performed with satisfactory results. One patient suffering from extravasation of urine had to be operated on within a few hours of

his arrival at the hospital and he is now making a good recovery. The operations so far have been chiefly for necrosis of bone, ununited fracture, radical cure of hernia, varicose veins, enucleation of the eyeball, and amputations of the finger. The x rays have been useful in localising pieces of dead bone.

Many of the men who have been wounded require no operative treatment whatever and with careful antiseptic dressing the wounds heal perfectly. One patient was shot through the chest, the bullet passing obliquely from above downwards and from behind forwards, but after suffering from hæmoptysis for a week the wounds healed perfectly and in a month he had quite recovered without any signs of disease in his lung.

March 31st.

THE HOSPITAL SHIP "NUBIA."

The hospital ship *Nubia* arrived at Southampton on May 1st with 28 sick and wounded officers and 270 non-commissioned officers and men from Durban. Most of the invalids came from Intombi and Mooi river hospitals and had gone through the vicissitudes of the siege of Ladysmith. The *Nubia* is a P. and O. steamer that for some years past has been chartered by the Admiralty as a transport, and she was turned into a hospital ship at Durban about Jan. 1st. She remained at Durban until April 1st, when she sailed for Cape Town and Southampton. She is the largest hospital ship afloat and was pronounced by Sir William Mac Cormac and other experts to be superior to any they had seen. There is every convenience and luxury in the wards, including swinging cots, electric fans, &c., and there are fine operating-rooms, and Roentgen ray rooms on board. Captain T. W. Gordon Kelly, Militia Medical Staff Corps, is the medical officer in charge, and under him there are a staff of five surgeons and seven nursing sisters.

(FROM OUR SPECIAL CORRESPONDENT AT THE BASE.)

The usual daily routine still goes on out here and very little of interest to your readers takes place. We get the hospital trains down with more or less regularity, conveying generally more sick than wounded patients, and since the relief of Ladysmith we have had several patients who had gone through the siege. With the exception of being pulled down and of showing symptoms of mal-assimilation of food the majority of the latter very soon pick up again and in a week or two are fit for duty. The Portland Hospital from Rondebosch has by this time moved up to the front, and any cases that are left have been distributed in the case of officers to Claremont and of the men to the various general hospitals.

I saw yesterday a "clip" of cartridges, Mausers, that had been brought down from the front by an officer which at first sight appeared to have been painted green, but closer examination proved that the bullets had been dipped in verdigris. I can personally vouch for the above as I handled some of the cartridges. If the "gentle pastoral Boer" has done this on his own initiative he deserves to be bayonetted wherever he is found, but I cannot help thinking that some of the many foreign friends of the "slim ones" are responsible for it.

Enteric fever amongst the prisoners (Boer) at Simon's Town is still very serious and the number of cases is great, the mortality being very heavy, though every possible effort is being made by the medical authorities to cope with the outbreak. There can be no doubt but that the Boers brought the disease down from the front with them, as none of the crews of the transports are suffering and our men are not affected. A special hospital has been established for their treatment at Simon's Town and all comforts and luxuries compatible with their condition have been provided.

The weather out here now is beginning to be much more wintry, and the change of temperature will be sure to exert a marked influence on the number of bowel complaints, in fact the majority of the patients coming down are suffering from dysentery in some of its forms.

As is only to be expected the delay in moving forward is increasing the sick-rate, as experience shows that both officers and men are much better and show a lighter sick return when on the move and at work. However, it cannot be helped, I suppose, but everyone will be much relieved when the time comes again for an advance.

Every home-going transport now takes its quantum of sick and wounded, and I should imagine that the resources of Netley are taxed to their utmost. Still the fact remains that the voyage home works wonders, and by the time they arrive a great number of the patients are fit to return.

It is the intention of the authorities to begin the erection of huts in the place of the tents which are in use at present at Nos. 2 and 3 General Hospitals here; in fact as the rainy season is now beginning it would be impossible to treat the cases under canvas.

I sent you last week some drawings of interesting cases, and an assortment of the various bullets which I have met with since the war began, but I am sorry to say they went to the bottom in the ill-fated *Mexican* which took our mails and parcels. I am very sorry, as I had taken some time to collect them and they would have been of interest to your readers. However, I hope to be able to duplicate them before the campaign is over.

There is no doubt that the expansive bullet is being used very freely by the Boers, and several instances have occurred where they have been actually found in the possession of prisoners.

April 4th.

THE EXHIBITION OF THE ROYAL ACADEMY OF ARTS.

THE 132nd exhibition of the Royal Academy of Arts, which will be opened to the public on Monday next, does not present many features of novelty. To a more than usual extent the work of old favourites is upon the lines which has gained them their popularity, Mr. Abbey's big historical picture, the veteran Mr. Sydney Cooper's animal pieces, Mr. Goodall's Oriental scenes, Mr. Leader's landscapes, and Mr. Marcus Stone's illustrated story being especially familiar in design and treatment. The water-colour room and the departments devoted to sculpture (including medallion work), to enamels, and to miniatures become every year more popular with exhibitors and more worthy of attention, but the same improvement of standard is not perceptible in that large half of the exhibition which for most people means the whole exhibition and which consists of the 11 rooms of oil paintings. There are, of course, many pleasant pictures, there is much conscientious drawing, and there are a few good portraits, Mr. Sargent, Mr. Cope, Mr. Melton Fisher, Sir Philip Burne-Jones, and Mr. Bramley being happiest.

The success of two new Associates, Mr. La Thangue and Mr. Clausen, of recent years is maintained; the latter in particular being seen to advantage in at least five out of six contributions, while his influence has certainly been felt by other painters. For there are many more pictures this year than usual painted in cool greys, and subdued greens, violets, and browns. This is a relief to the eye of the spectator, which for several years has been much tortured by rows of pictures painted up to the Academy pitch. Mr. La Thangue in a little picture of a girl—No. 68, in Gallery III.—shows that the tendency to become melancholy when using lower tones need not be followed, for this beautiful piece of colouring is every whit as bright and far more pleasing than the garish confections of orange and purple that lately have been too common on the walls of Burlington House as specimens of colour arrangement. M. Bouguereau's picture—297 in Gallery V.—will be considered by many the best painted work in the exhibition. The pretty insipidity for which this painter is so often blamed is certainly present in the Virgin's face, but the picture is none the less a very fine one, while the Child is admirably drawn and painted. The man must be catholic in his tastes who can honestly admire M. Bouguereau and Mr. Sargent, but the French master is a fine painter, to whom most of our Royal Academicians cannot hold a candle.

The place of honour in the large Gallery No. III. is given to portraits by Mr. Orchardson of the Queen, the Prince of Wales, the Duke of York, and Prince Edward of York. This is a family picture, simply entitled "Windsor Castle, 1899, Portraits," and the stiffness of composition has been purposely adopted to bring the faces of the four generations into prominence. The portraits are distinctly good, and no one can see them without observing the remarkable likeness, especially about the eyes and lower

part of the mouth, which runs through the four generations. The Prince of Wales is portrayed once again in the same gallery by Mr. Ouless as Commodore of the Royal Yacht Squadron, where the face is stronger and graver, as befits the different environments, and a third time by Mr. Caton Woodville with not so happy a result. In Gallery III. hangs also what may turn out to be the picture of the year—the portraits by Mr. Sargent of Mr. Percy Wyndham's daughters, Lady Elcho, Mrs. Adeane, and Mrs. Tennant. This is a wonderfully effective picture, but to our mind time will be required to make the flesh look natural. The picture is splashed on to the canvas with a vigour that has its drawbacks as well as its advantages. Until the whites have approximated a little more to the shadows and the very rosy tips to the fingers and ears have become subdued the effect will remain too theatrical. Time will rectify this and restore the figures to the canvas, from which they now stand out in too marked a manner. A portrait in Gallery I. by the same master of Lord Dalhousie is exceedingly elegant, and shows quite well that Mr. Sargent has no need to be quite so coarse to get his effects. Of medical portraits there are this year only two—an accurate likeness by Mr. F. W. Carter of Dr. Saundby and a dignified portrait by Mr. H. S. Tuke of Dr. Henry Rayner. Each is a pleasant presentment of its subject and should give pleasure to the friends of the original. In the sculpture-room there is a good bust of Mr. Pickering Pick, a bust of Mr. McHardy, and a medallion portrait of Dr. Parkes Weber.

Among other pictures worthy of close attention we must mention No. 636, by Mr. F. M. Bennett. The subject is the Death of Ladas as he is going up to receive his crown at Olympia. The grey shade of acute heart-failure is well expressed and the grouping of the figures skilfully managed. No. 1074, Mr. Edgar Bundy's "Watercress," is also a very noticeable work. Mr. Goodwin's delightful fantasies, No. 463 and No. 575, together with his water colour representation of Berne, No. 1276, should also not be missed, and the same may be said of the charming little water colour, No. 1139, by the President; of Mr. Leopold Rivers's landscape, No. 1147; of the clever picture of old Boston, by Mr. H. Goodwin, No. 1095; and of Mr. A. Fisher's silver and enamel group, No. 2033.

One artist, Mr. William Small, has painted a picture—No. 1016 in Gallery X.—illustrating an episode in the day of a country practitioner with great fidelity. The child of a gipsy has been taken ill and the dog-cart of the medical man has been stopped as it is passing the encampment and the driver begged to give his advice. All the figures are life-like, the anxiety of the mother and father, the curiosity of the other children, and the complete absorption of the medical man in his stethoscopic inquiry, directed to the right of the sternum at the level of the third interspace, all being well depicted. But the little patient does not look ill, and although so careful a practitioner as Mr. Small has indicated will not be satisfied until he has made a thorough investigation, we guess that his diagnosis will be indigestion.

THE DINNER AT THE REFORM CLUB TO SIR WILLIAM MACCORMAC AND MR. TREVES.

ON Saturday night last, April 28th, Sir William Mac Cormac, President of the Royal College of Surgeons of England, and Mr. Frederick Treves were entertained at dinner by their fellow-members of the Reform Club upon their return from South Africa. Lord Rosebery presided, and there were 100 members of the club present, including most of the medical men on the roll of membership, among whom we may mention Sir C. Nixon, Mr. Buckston Browne, Mr. Mayo Collier, Dr. R. Farquharson, M.P., Dr. S. H. Habershon, Dr. G. Hastings, Mr. W. H. H. Jessop, Dr. Stephen Mackenzie, Dr. E. D. Mapother, Mr. Malcolm Morris, Dr. G. Ogilvie, Mr. A. Q. Silcock, and Mr. T. S. Townsend.

Lord ROSEBERY, who was in the chair, after the loyal toasts had been duly honoured, proposed, with his usual fortunate choice of language, "The Health of Sir William MacCormac and Mr. Treves." After commenting upon "the rare occasions when the Reform Club is able to rouse itself from what may be called its habitual lethargy" and treating the audience to a well-chosen anecdote about Lord Beaconsfield, for the truth of which he refused to vouch, his lordship adopted a graver tone and spoke in terms that will not readily be forgotten of the Army Medical Department and all concerned in helping it during the present war. "We have had," he said, "gigantic preparations costing unnumbered millions sterling, and likely to cost as much more. We have given all ungrudgingly, but the results have not been in every respect, and in all respects, completely satisfactory, but nations that engage in war must be prepared to take the ups with the downs and the darker shade with the brighter shade. The correspondence sent home from this war has been greater than has ever attended a war before, because it is the first time that a wholly educated army has been brought into the field, and every private soldier can write home, and there has been much diversity of opinion in the accounts. But there has been unanimity on one point, and enthusiastic unanimity, and that is that the medical and hospital service has been perfect. That is due mainly to the Government, because the Government has been able to obtain the men and to give the supplies which those men have used. We must always give credit to the Government where credit is due. They sent two of the most eminent men they could think of to South Africa and they gave them a free hand. All honour to the Government and all honour to the men. Those are the men whom you are entertaining to-night. Without a second thought they left their great practice, they left their great connexion in this country, and went out for six months, at what sacrifice you can guess, to superintend the hospital arrangements and the surgical arrangements of our army. We hear much of patriotism in these days. We sing patriotism all day long, but for cold, deliberate, thoughtful, conscientious patriotism commend me to these two men. I do not think they need any mention from me. Sir William Mac Cormac's name is a household word amongst us. He has been, I think for four successive years, chosen President of the Royal College of Surgeons of England. He earned his spurs on the battlefield 30 years ago. Perhaps he may not like to be reminded of that, but we remember it, and I think it would not do any harm to our French friends if they remembered it too. In the Franco-Prussian war, amid the bloody and thunderous scenes of Sedan, Sir William Mac Cormac for 48 hours was continuously carrying on surgical operations in that part of the world. He has brought his experience and his skill to bear upon our war and our soldiers in their turn. Mr. Treves, too, left a great practice, and applied his unrivalled skill for the same purpose. But we are not merely honouring two medical men and two fellow-members of the Reform Club to-night; we are not merely honouring the consummate act of patriotism on their part, but I venture to think we are recognising something more, which is not perhaps so much recognised as it ought to have been. We are paying honour to two non-combatant members of our army whose heroism is not less than the heroism of those who are engaged in forlorn hopes, for they have to go defenceless, exposed to fire as much as the soldiers they attend. And it is in that spirit and with that recollection that I ask you to drink with all honour to Sir William Mac Cormac and Mr. Treves."

Sir WILLIAM MACCORMAC, in returning thanks for the great honour done to him by the Reform Club, said it was with some reluctance that he went out to South Africa, but he deemed it right to go from a belief that it was right as well as because of the experience he had gained in previous wars might prove of service. It was no part of his duty to criticise either the politics or the conduct of the war, but he might repeat what had already been well said that never had the courage and endurance of our soldiers been greater. We might well be proud of our fellowship with the race to which they belonged. The conditions under which they fought might well have dissuaded the bravest. As an illustration he referred to the battle of Colenso where in one day there were some 1140 casualties. He had had an opportunity of learning, on what he thought to be good authority, what the Boer losses were on that occasion. He heard from the German officers who were there watching the methods of Boer warfare—and the statement was subsequently confirmed by the Free State Secretary, Mr. Fischer, with whom he had several conversations—that the total loss of

the Boers on that day was five killed and 25 wounded. This might well be true, for our soldiers never caught sight of a Boer the whole day. When he (Sir William Mac Cormac) had an opportunity afterwards of seeing the Boer positions about Colenso and their trenches, the only wonder was, he thought, that any Boer was injured or that such places were anything short of impregnable. And this small number of casualties occurred in spite of the previous two days' heavy bombardment of artillery. Our modern guns seemed but little more dangerous than the older weapons. In fact, Commandant Albrecht, the Boer artillery captain, calculated that 12 Boers were killed and 40 wounded for every 1000 of our shells fired, so it might be said that our modern guns had not achieved the results that were expected of them so far as killing was concerned. One thing that was very remarkable was the comparative harmlessness of the wounds inflicted by the Mauser bullet. Men recovered after being shot through every part of the body and 96 per cent. of those treated in the base hospitals recovered from their injuries. Another remarkable fact was the fewness of the amputations performed. During the first four months of the war only 20 amputations were performed at the No. 1 General Hospital at Wynberg. Our Lee-Metford projectile inflicted a very similar kind of wound, but the Boer wounded did not get such good treatment as did the British. The Boers did not possess, as our troops did, a first field dressing, whose speedy application doubtless saved much life and suffering. During his stay in South Africa he examined the medical arrangements both throughout the Cape Colony and Natal, and he did not believe that it would be possible to have anything more complete or better arranged. Lord Rosebery had referred to the action of the Government, and he thought that too much praise could not be given to the Government in regard to this matter. There was nothing that was suggested, nothing that money could purchase, that was not forthcoming when and where it was wanted. He did not think that the enormous distances which food and forage, and even water, had to be transported—not to mention the munitions of war and the troops—were fully realised in this country. He himself had traversed 6500 miles of country, often under very uncomfortable conditions of transport. The convoys were prodigious in size. One which he saw was six miles or more in length, each wagon drawn slowly along by 16 oxen, and many such followed laboriously in the rear of each of our divisions. In spite of these difficulties of provisioning such a large army so many miles from their base he found that in all cases the soldiers received a daily supply of fresh meat and bread, and that, except perhaps during the actual hours of fighting, the hardships experienced by our men in the matter of commissariat might be counted as not worth mentioning. Officers and men received the same supplies. He did not, as he said, intend to talk politics, but he might express his conviction that nothing could have averted the war. Had it not come now it must have come later, and at any cost of life and money we must succeed if we were not to abdicate the proud position the British Empire now occupied. He would even go further and say that in his opinion the war was one of the best things that had happened to England in this century, because it had brought out England's manhood and had exhibited the virtues of our countrymen not only to ourselves, but to those abroad. Without doubt our country would emerge better and more powerful from the contest than it had ever been before. This war, too, would unite our children in the great colonies to us in bonds closer and more affectionate than was ever thought possible before, and it would sweep away a narrow, bigoted, and corrupt oligarchy and substitute for it a just and honest Government. He was only entitled, however, to speak with authority of the medical arrangements of the war, and it was not only his own opinion, but also that of all those who were competent to form one, that these arrangements were better than they had ever been before. It was a good thing, not for the soldier only who benefited by these arrangements but for those at home, that they should feel that what was done for their beloved ones was the best that could be done. Of the medical officers it might be said that they had shown themselves to be without fear, as most certainly they were without reproach.

Mr. TREVES said that he felt it a great honour to be entertained at dinner at the Reform Club. He confirmed what Sir William Mac Cormac had said about the treatment of the sick in South Africa. There had never been a campaign in which the miseries of war had been so mitigated and where the care of the wounded had been so thorough. He accompanied the field hospital which followed the Ladysmith relief column from beginning to end. He was present at every engagement, from the battle of Colenso to the relief of Ladysmith, and their hospital, small as it was, received all the severely wounded during the whole of the Natal campaign. After the battle at Spion Kop 715 wounded were put into the hospital camp. One afternoon they had orders to clear the camp of wounded before sunrise next day and 150 men were carried on stretchers by hand to Frere, 26 miles, a thing which he believed had never been done in a campaign before. During the time he himself was at the seat of war he saw much of the common soldier. At the scene of action the common soldier's better qualities were shown. The singing of the National Anthem by the troops at the Church parade before the advance on Spearman's Camp was a scene he could never forget. Many of the men who took part lost their lives a few days later at Spion Kop. The fighting spirit of the British soldier was astonishing. He asked one man who was shot in the back how he was hit. He was advancing to attack a kopje entrenched by Boers and men were falling on all sides. He aimed at a particular Boer and missed him, but brought him down with a subsequent shot. "Doctor," he said, "you should have been there; it was a dream." This only showed that the common soldier had thoughts beyond his 1*s.* 1*d.* per day, and he did not think the British soldier quite got the credit of it. He himself was struck not only with the patriotism and pluck of these men, but with their kindness to each other and their unselfishness. So far as the sick were concerned there were two plagues in South Africa—the plague of flies and the plague of women. The flies could be got rid of by means of horsehair wisps, gauze, and other appliances, and they disappeared at night, but the women mentioned in Sir Alfred Milner's proclamation were absolutely a terror. They came out professing to be amateur nurses, having exhausted every other form of excitement; they took up the time of the officers and caused much unnecessary trouble. Considering the kind of war in which we were engaged and the number of lives lost, the picture of a number of elaborately-dressed ladies promenading about Cape Town was a blot on the campaign. No one who read Sir Alfred Milner's proclamation on this plague could appreciate it so much as those who had suffered. In conclusion, Mr. Treves said that he had come back proud that he was an Englishman and a surgeon, and exceedingly grateful that he was a member of the Reform Club.

Lord RUSSELL OF KILLOWEN proposed the health of the Chairman, to which toast Lord ROSEBERY made a brief reply, closing the proceedings.

THE REPORT OF THE INSPECTOR-GENERAL FOR RECRUITING FOR 1899.

THE annual report of the Inspector-General for Recruiting for the past year is, at any rate in one important respect, most satisfactory. It has been, we are told, the best year for recruiting since the introduction of the short-service system. The number of recruits raised for the regular army amounted to 42,700 and for the militia 40,653. When we come to analyse the report, however, we find that this favourable rate was not a continuous one occurring under normal conditions more or less present throughout the year, but was mainly attributable to the wave of enthusiasm created in this country by the war. It has often been said that this country is a warlike but not a military one. It is, as far as it goes, very satisfactory to find, however, that an ample supply of recruits is always forthcoming when there is a good chance of seeing active service, but, as the Inspector-General observes, we want to attract a sufficient number of men into the army when there is no such immediate prospect. There is reason to believe that the improved system of recruiting—one of decentralisation—introduced in the early part of last year

has done some good. It is too soon yet to form any judgment as to what will be the ultimate effect of the adoption of a shorter term of service; so far the influx of recruits caused by the war has not made any appreciable addition to the numbers enlisting for three years. There seems to be little doubt that the certainty that reservists will have employment to resume on their return from South Africa and that their wives and families will be well looked after during their absence will eventually do away with much of the feeling which exists against the army. The assurance of soldiers finding work in civil life on leaving the colours will, if this can only be arranged, have a very favourable effect, but we think that a good deal still requires to be done to popularise the army and to bring it abreast with the changed conditions of modern life. It cannot be doubted that the discipline and the numerous restraints incidental to military life tend to make the army unpopular in consequence of their being distasteful to the ordinary run of young men. Military training and discipline there must be, of course, but everything that can be done in the way of treating the soldier as a reasonable, well-disposed human being, by giving him as much individual freedom and by making his life and duties as little irksome as possible, should be done. Depôts and recruiting rooms should occupy good positions in good neighbourhoods and be kept airy, clean, and respectable and be properly furnished and equipped.

It cannot be denied that the condition of the rank and file of our army has been enormously improved of late years; but there are still several details capable of improvement, some of which would add to the soldier's comfort—the better lighting of barrack-rooms, for example. The army should be made to open a really good career for a young fellow possessed of the intelligence and qualifications to make a good soldier and animated with the ambition to win military distinction and a name for himself. The opportunities available in this direction require, in our opinion, to be largely augmented by raising the number of commissions open to men of this stamp and serving as non-commissioned officers or in the ranks of the army. But this must either be accompanied by some Government allowance or extra pay to maintain the newly-acquired position, or the cost of an officer's living in the army must be made very different to what it has been and is at the present time. The pay of a subaltern in the army is proverbially insufficient to maintain him in that position, and so long as there is an abundant supply of candidates always forthcoming for the commissioned ranks it is not likely that the pay for these ranks will be augmented, consequently we must look to a reduction in the rate of living, a levelling down of mess expenses, as an alternative. We should deeply regret if "the duke's son" and our aristocracy and county families were not well represented in the army, for their presence is highly beneficial in various ways. Still, it must not be forgotten that many of Napoleon's generals and officers of high rank were not drawn from the more privileged classes.

THE WARMING AND VENTILATION OF THE LONDON HIPPODROME.

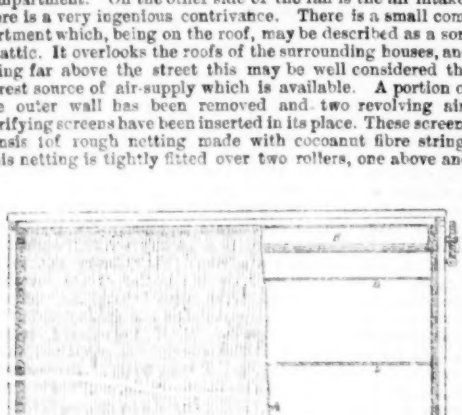
THOUGH in no country is the value of an ample supply of pure air better appreciated than in England its people are nevertheless much behind those of some continental countries in respect to the warming and ventilation of theatres and other places of assembly. There is no theatre in England ventilated with the same scientific care and precision as is the Vienna Grand Opera House, the Grand Theatre at Geneva, or the new Paris Sorbonne. The mere fact that at Vienna three entire floors of the same size as the body of the theatre are devoted exclusively to the purposes of ventilation is a sufficient proof of this assertion as regards that city. As a rule, theatres in England have no other ventilation than such as may be ascribed to the accident of their construction. The heat produced by the central lustre is utilised as an exhaust and the air comes in haphazard, by doors, by windows, and by stray apertures, and here and there may be found hot air or steam coils to counteract the coldness of such inrushes of the outside atmosphere. The general result is foul air or a dangerous draught and the spectator very often experiences both of these inconveniences in the course of the same evening. The fact is, that no theatre can be ventilated except by mechanical means, and even where these means exist it is also necessary to have skilled attendants ever on the watch in order to modify the action of such machinery according to the fluctuations of the temperature and the number of persons in the building. The outside temperature ought not to influence in any way the volume of air supplied to the house, but if ventilation is not controlled by machinery and if it has to depend on mere apertures—doors, windows, shafts, &c.—the air will travel slowly on dull, heavy, and sultry days and quickly on cold days or when a sharp wind is blowing. Thus on one occasion the ventilation will be insufficient and on another it will be excessive and in neither case is it possible to estimate how much ventilation has been provided. In the face of these unscientific and unsatisfactory conditions we can only welcome all the more cordially the effort which has now at last been made to grapple with the problem. The London Hippodrome which has recently opened its doors to the public is provided with systematic and mechanical ventilation which, though not equal to what is found on the continent, is immeasurably superior to what we have for so long been compelled to endure in England.

The London Hippodrome is a spacious and magnificent building, fronting Cranbourn-street and Charing Cross-road. It combines in one both a circus and a theatre, the former occupying the space which in most ordinary theatres is allotted to the stalls. Under the floor of the arena there is a tank, eight feet deep and measuring in circumference 230 feet, which holds 100,000 gallons of water, so that aquatic displays can also be given. The water in this tank is allowed to run to waste once a week and the tank is then cleaned out. If some sort of arrangement could be made with the sanitary authorities this large volume of water might be so discharged as to serve for flushing purposes and thus help to keep the sewers clean. The stage, which measures 48 feet by 30 feet, though it is generally raised seven feet above the arena, can be lowered to the same level, and the two combined afford a large space for spectacular exhibitions. Behind and below the stage there are at present cages where no less than 21 lions are kept and where there are also a great number of performing dogs, cats, and other animals. With such a number of animals living on the premises the question of ventilation is of more than usual importance, for the peculiarly pungent odour of feline carnivora would be especially obnoxious if the ventilation was not very efficient. Even with good ventilation the odour of the lions might be perceptible among the audience if the currents of air travelled from their den towards the auditorium. Contrary, however, to the usual practice, the ventilation at the London Hippodrome is from above and the outlets are below the audience at the lowest levels of the basement. There is much to be said in favour of downward ventilation in places where many people congregate together. For instance, at the Havre Exchange there is a gallery round the great hall and on this gallery are situated the library and various offices. The exhalations from the bodies of the merchants and business men crowded below, their breath, and their stale tobacco smoke, formerly ascended to the gallery and greatly inconvenienced its occupants. M. E. Delachanal, engineer of the Havre Chamber of Commerce, was consulted and he forthwith reversed the system of ventilation. He perforated the floor of the Exchange in all directions, and made the air come in from the roof and carry down through the floor the tobacco smoke and the effluvia, &c., of the people, and the vitiated air disappeared under their feet instead of rising up to pollute the upper parts of the building. The London Hippodrome is likewise ventilated by a downward current.

The problem stands thus. The cubic contents of the building are set down at 300,000 cubic feet. There is sitting accommodation for 3000 people. The object of the ventilation system is to renew the air-supply at the rate of 1500 cubic feet per head per hour. To ensure that this amount of air shall be delivered in the given time and independently of all variations of temperature within and without the building a large centrifugal fan is employed. There are, broadly speaking, two sorts of fans that can be employed—one for volume and the other for force. Where, as in the case of a coal-mine, the air has to travel a great distance

along a shaft to reach the galleries in the pit force is necessary. In that case the wings or arms of the screw or paddle fit closely to the drum-shaped case in which they revolve. This gives the greatest resistance. To propel the air greater force has to be employed, and therefore it travels further, just as the tighter we ram the wadding in a smooth-bore gun the greater will be the impetus given to the missile. As, however, in the limited space of a theatre the air has to travel but a short distance it is volume and not force that is required. The fan employed at the London Hippodrome is known as the Stott air propeller. In shape it is more like the paddle-wheel of a steamship than the screw. The case in which it revolves is in shape like the shell of a snail. The conical point of the shell is cut off; or, in other words, the tail of the snail with its enveloping portion of the shell are amputated and the circular hole thus made provides an air inlet. In a line with this central and smaller circle there are only the spokes of the wheel to be seen, but in the larger circle covered by the remainder of the shell are the fans attached to these spokes. As these paddle-like fans revolve they beat the air downwards towards the widening mouth of the shell. Thus the top of the shell serves as the inlet, the larger mouth of the shell as the outlet, and the fan wheel revolves within the circle in the centre. To reduce the force of the resistance and to economise the amount of motive power which has to be employed, so that the air may travel with less velocity, the two outward corners of each paddle or fan are cut off. There is thus a small space within the enclosed circle or drum where the air is not struck and where, therefore, it may escape. It is as if there was a small hole in the breech of a gun, lessening the force of the explosion as it travels down the barrel. The amount of air propelled corresponds with the size of the fan that beats the air and of course with the rapidity of the revolutions, but the amount of resistance corresponds with the tightness with which the fan fits within its case. By cutting off the corners of the fan, therefore, the fit is not so precise, the resistance is not so great, and the velocity at which the air travels is proportionately reduced. The centrifugal fan employed at the London Hippodrome can propel 4,500,000 cubic feet of air per hour. A noiseless engine of 15-horse power supplies the motive force. This engine stands close to the fan on the roof of the building, but receives its steam from below, where a Lancashire boiler is placed in a fireproof compartment. On the other side of the fan is the air intake. Here is a very ingenious contrivance. There is a small compartment which, being on the roof, may be described as a sort of attic. It overlooks the roofs of the surrounding houses, and being far above the street this may be well considered the purest source of air-supply which is available. A portion of the outer wall has been removed and two revolving air-purifying screens have been inserted in its place. These screens consis tof rough netting made with cocoanut fibre string. This netting is tightly fitted over two rollers, one above and one below. The rollers are made to revolve by the same engine that works the ventilating fan and the lower roller is placed in a trough of water. As they revolve the net is drawn down into the water on the outer side of the roller and up out of the water on the inner side of the roller. Thus the network is in constant motion and is constantly being washed. When the fan in this little attic revolves it must draw its supply of air through these nets. As the nets readily absorb water and their material is very fibrous they arrest the impurities—soot, dirt, &c.—floating in the air. The amount of purification thus accomplished can readily be seen by noting the filthy condition of the water in the trough. Indeed, it is necessary to constantly renew this water by flushing out the trough, otherwise it would soon become as black as ink. By putting scent into this trough the whole theatre could be rapidly perfumed, or in times of epidemic a disinfectant might be used. The contrivance will also serve to preserve the decorations and furniture of the theatre which will not be so rapidly discoloured by the soot and dirt which abound in the ordinary London atmosphere. Thus all the air which is pumped into the building by the fan is washed, filtered, and moistened. This, especially in dry summer weather, will be beneficial and agreeable.

Side view of the air filter. B, The upper roller. D, Screw for tightening the net. The water trough is below. The arrows indicate passage of air.



The filter. B, C, Upper and lower roller. D, D, D, Frame to hold the net. A, The cocoanut fibre net air filter. G, The trough in which the filtering material passes through water.

The system of warming the air is more open to criticism, though any inconvenience that may arise could be easily remedied. On the exit side of the fan there is a large battery of heating pipes with cast-iron gills. The air is warmed by passing over these pipes and through the gills that protrude around them. All the exhaust steam from the engine passes through these pipes, and as the temperature of this steam is only 218° F. it is doubtful if any harm is done; but when the weather is particularly cold live steam is discharged into the warming batteries and the question arises whether the heat is not then so great as to devitalise the air. At the Sorbonne the batteries in the heating furnace are raised to about 300° C. At the Vienna Grand Opera House there are 59,058 feet of piping containing steam at five-atmosphere pressure; but neither at the Sorbonne nor at the Vienna Grand Opera House is the air thus heated allowed to reach the auditorium. The object, on the contrary, is to ensure that by far the greater part of the air supplied shall not have been heated but shall be in its natural condition. For this, however, a mixing chamber is necessary where a small quantity of superheated air mingles with a large quantity of air that has not been heated at all and the required mean temperature is thus obtained. Certainly the washing and filtering of the air must very considerably reduce the number of suspended particles that might be carbonised by a heating arrangement. The carbonic acid produced by the combustion of invisible particles tends to vitiate the air, and the theory is that the greater part of the air supplied should come from the outside and should not be tampered with unless for the purpose of filtering and moistening. After passing through the warming batteries the air enters a wide circular passage that goes all round the central domed roof of the auditorium. When inspected this passage had no flooring; there are the girders and between them the plaster and gilt decorative work forming the ornamented ceiling which runs round the aperture or "lantern" of the roof. Between the carving and details of the decorative design there is ample space for the warmed and filtered air to descend on to the audience below. Of course, the tendency at present must be for the greater part of the air to descend from that part of the passage which is nearest to the point where the air is forced in by the fan; but the passage will ultimately have a floor, the boards of which will be placed at a little distance from each other so that the air may pass down between them. These openings, we would suggest, should be made larger and larger as the distance from the point of entrance for the air-supply increases. By making the resistance to the passage downward of the air greater where the pressure is greatest there will be a better

chance of an equal amount of air finding its way through the floor at the farther extremities of the passage. Then, again, as this passage is about 10 feet wide there is room here to arrange for a mixing chamber if it should be found that the warming batteries dry up the air too much. Therefore, if the criticism with regard to the batteries holds good, the remedy is ready at hand.

By the side of the space or little passage on the exit side of the fan where the warming batteries are placed there is a second parallel passage where there is no warming apparatus. A door connects the two passages. By opening this door the air can be sent through without passing over the steam coils. This will be done in hot weather when it is not necessary to warm the building. Further, the domed roof in the centre can be removed, and thus, when the weather is warm and fine, the summit of the auditorium will be uncovered and open to the sky. The air being admitted at the top of the building and at a great height has time and space to spread out and lose much of its velocity before it reaches the audience. At the Sorbonne, where the air enters under each seat, it at first only travels at the rate of 10 inches per second, but at the final outlet in the roof, which is 14 metres square, it travels at the rate of 1·20 metres per second. At the London Hippodrome the reverse is the case. The air enters quickly at the farthest point from the audience and spreads out and travels slower as it approaches the spectators. As it passes through the ceiling to reach the audience it is said to travel at the rate of three miles an hour, but when it reaches the spectators its velocity should be considerably slower. As the current is from above and from the centre it passes out by all the side exits. Therefore, if a door is opened—for instance, the door of a box—the pressure being from within the tendency is for the air to rush out, and hence there is an absence of draught. Below, in the basement, there are numerous apertures which communicate with two upright exhaust shafts. In each shaft there is an electric motor fan which helps to draw away the spent air, and it is discharged over the roof. By the side of the cages where the lions are kept an extra electric motor fan has been inserted so that all the air near the dens shall go direct to the nearest exhaust shaft and not spread to any other part of the building. Thus there is no odour, and it would be difficult to believe that there are so many lions on the premises but for an occasional sinister roar of a very unmistakeable and threatening character. As the air is warmed before admission there are no hot-air coils about the building. These are never ornamental and they harbour dust and people are apt to stumble over them. The method of warming and ventilating is not expensive, for one outlay in fuel suffices for both purposes. This may be taken either way: the cost of the fuel to create the motive power which works the fan and thus supplies the ventilation also provides the steam for the heating batteries, or else the heating batteries provide the steam for the engine which sets the fan in motion. The process of warming and ventilating is generally commenced about three-quarters of an hour before the doors are opened for a performance and the public therefore find a pleasant atmosphere and temperature when they enter.

As to the beauty of the building and as to the comfort of the seats, which from the cheapest to the dearest all command a complete view of the stage and the arena, we must leave the public to judge for themselves. We do not propose to criticise the architecture of the structure, the decorative art lavished upon it, or the performances, whether theatrical or "variety," carried on within it; but we can say that the greater the perfection attained in all these respects the more complete are the relaxation and pleasure afforded and the more wholesome will be the effect produced on mind and body.

No amount of good acting and no beauty of decoration can possibly mitigate the evil effects of draughts, of unsuitable temperature, or of foul air. The constructors of the London Hippodrome, and notably Messrs. James Stott and Co. who have been entrusted with the warming and ventilating of the building, have acted in accordance with these principles. Beauty in design and in decoration has been combined with the desire to provide comfort in respect to the seats, the temperature, and the purity of the air breathed. This is a very great improvement and it is high time that the proprietors of other theatrical establishments should endeavour in regard to these matters to put their houses in order.

THE ROYAL COLLEGE OF PHYSICIANS OF LONDON.

A MEETING of the Comitia was held on April 26th, Dr. W. S. CHURCH, President, being in the chair.

The PRESIDENT read a telegram from H.R.H. the Prince of Wales, thanking the College for the telegram which had been sent to him after the recent attempt on his life.

The PRESIDENT announced that the fourth chapter of the Plague Commission Report had recently been presented to the College by the Government.

The following gentleman was admitted as a Member of the College:—John Roger Charles, M.B., B.A. Cantab., L.R.C.P.

Licences to practise were granted to 114 gentlemen who had passed the requisite examinations.

The Murchison Scholarship was awarded to Mr. Thomas Crisp English, L.R.C.P., a student of St. George's Hospital.

The following gentlemen were elected as Fellows of the College: Clement Dukes, M.D. Lond.; Robert Bridges, M.B. Oxon; Seymour Taylor, M.D. Aberd.; Amand Jules McConnel Routh, M.D. Lond.; Charles Montagu Handfield-Jones, M.D. Lond.; Richard Thomas Williamson, M.D. Lond.; Leonard George Guthrie, M.D. Oxon.; Frederick Foord Caiger, M.D. Lond.; Herbert Morley Fletcher, M.D. Cantab.; Henry Albert Caley, M.D. Lond.; Henry Head, M.D. Cantab; and Fleming Mant Sandwith, M.D. Durh.

A report, dated March 26th, was received from the Committee of Management. The Committee made the following recommendation:—

That time spent as assistant in one of the hospitals attached to the army in South Africa, not exceeding a period of six months, be allowed to count for the equivalent period of medical and surgical hospital practice and for three months of the required period of surgical dressership, on the understanding that allowance will only be made for the number of months, not exceeding six, during which the student shall be in the service of the hospital, and for which a satisfactory certificate from the principal medical officer of the hospital shall be produced.

The Committee also recommended that the Southampton Fever Hospital should be added to the list of fever hospitals recognised by the Examining Board in England.

On the motion of Dr. NORMAN MOORE, seconded by the REGISTRAR (Dr. E. Liveing), the report was adopted.

A report was received and adopted from the Laboratories Committee.

Communications were received from (1) the Secretary of the Royal College of Surgeons of England and (2) the General Medical Council forwarding a report by their Public Health Committee respecting the course of study for the Diploma in Public Health.

A copy was received of the statutes made for the University of London by the University Commissioners as laid before Parliament, and also a copy of the Regulations relating to the same.

Dr. W. H. ALLCHIN made a few remarks on the statutes and Dr. NORMAN MOORE referred to the excellent work done by Dr. Allchin in relation to the scheme which has now been adopted.

After some formal business had been transacted the PRESIDENT dissolved the Comitia.

ANNUAL MEETING OF THE NEW ZEALAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE fourth annual meeting of the New Zealand Branch of the British Medical Association was opened on Monday afternoon, Feb. 19th, at the City Council Chambers, Christchurch, New Zealand. Dr. W. G. SCOTT of Onehunga, presided.

The annual report of the Council stated that since the issue of the last report 31 new members had been admitted, making a total of 241 now on the rolls. The Council noticed with regret that death had removed two members of the branch, Dr. J. Cunninghame of Port Chalmers, and Dr. Niven, of Oamaru. The Council would be pleased to receive any information in reference to drugs derived from native

plants for transmission to the committees revising the British Pharmacopœia. The question of a Government pathological and bacteriological establishment, which was under discussion at the date of the last meeting, had been finally settled in accordance with the wishes of the Council, and members had only to send specimens to Wellington to have them examined and reported on. Arrangements for the supply of serums to the profession were not yet complete, but further developments were shortly expected. By arrangement with the Government forms had been sent to each centre for distribution among the members by the use of which every qualified practitioner would be able to avail himself of the services of the Government pathologist. Owing to the short and congested nature of the last session of the House of Representatives, the Medical Practitioners' Registration Act could not be gone on with, but the Council was assured of the real sympathy of the Government with the measure. The balance-sheet showed the receipts to have been £408 8*s.* 5*d.* and the expenditure £398 4*s.* 8*d.* The assets amounted to £56 10*s.* 11*d.*, the balance at the Union Bank, and the liabilities to £21 3*s.*, leaving a balance of £35 7*s.* 11*d.* credited to the branch funds, in addition to a fixed deposit of £53 12*s.* 10*d.* The report and balance-sheet were adopted.

The election of officers resulted as under:—President-elect for 1901: Dr. G. R. Saunders of Wanganui. Chairman of Council: Dr. W. Fell of Wellington. Editor and Parliamentary Secretary, Dr. J. Mason of Otaki. A discussion took place with regard to the question of cancelling the present arrangements with the *Australasian Medical Gazette* and resuscitating the *New Zealand Medical Journal*. It was resolved strongly to urge the Council to re-publish the *New Zealand Medical Journal* at the earliest possible opportunity.

In the evening the President for the ensuing year was introduced by Dr. SCOTT, after which Dr. W. THOMAS delivered the presidential address, which was on the subject of Colonial Practitioners and the Public; the address is published in full at page 1268 of the present issue of THE LANCET. On the motion of Dr. TRUBY KING, seconded by Dr. SAUNDERS, a hearty vote of thanks was accorded to the President for his address.

The annual dinner was held at the Christchurch Club. The thanks of the members were due to the committee of the club for their gracious consideration in this respect. It was even more successful than usual and about 40 members sat down—almost a record—when the President, Dr. Thomas, took the chair at 8 P.M. After the toast list had been gone through a move was made to the smoking-room, where coffee and conversation occupied the attention till a late hour.

The Canterbury Jockey Club—the premier jockey club in the Colony—forwarded to each member attending the Conference a complimentary ticket of admission to the beautifully appointed Riccarton Racecourse.

The chief work of the Conference fell on the shoulders of Dr. Thomas, the President, Dr. Graham Campbell, the general secretary, and Mr. Edward Gane, the secretary for the annual meeting. Everything was arranged in a most orderly fashion and nothing was omitted by these gentlemen to make the Conference of 1900 the brilliant success which it turned out to be. The members of the profession practising in Christchurch and taking an active part in the proceedings entertained their visitors with true colonial hospitality, and all enjoyed their stay in the "City of the Plains" immensely. The next meeting will take place at Wanganui in March, 1901; Dr. Saunders is the president-elect.

SOUTH WALES UNIVERSITY COLLEGE.—On April 23rd a deputation from the Council of the University College of South Wales and Monmouthshire, headed by Lord Tredegar, waited upon the Corporation of Cardiff and urged the presentation of a site for the College in Cathays Park. It was stated that the day students had increased from 150 in 1894–95 to 511 in 1898–99, and the expenditure from £5784 to £13,164 in the same period. The deputation added that if any considerable portion of the building fund of £50,000 is expended on the purchase of a site the remainder will be insufficient to begin building on an adequate scale. The mayor, in reply, said that the matter would receive every consideration, and subsequently it was decided to refer the question to a committee of the town council.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Cheltenham Urban District.—Dr. J. H. Garrett, the medical officer of health of this district, advises those who contemplate residence in Cheltenham to demand a corporation sanitary certificate for the house proposed to be leased. This certificate is only granted when all the sanitary requirements have been brought up to date. If arrangements such as obtain in Cheltenham in this matter were in force all over the country and intending tenants would take advantage of them much progress in the condition of house drainage would be made. In discussing the prevalence of scarlet fever in Cheltenham during 1899 Dr. Garrett makes some interesting comments on the natural history of the disease and inferentially on that of other diseases. He points out that there is no likelihood that scarlet fever will be got rid of by isolating all recognised cases in hospital; the unrecognised cases will always remain operative for harm. As he aptly observes, "the getting rid of this zymotic disease means the extermination of a species of natural growth, the units of which are of infinitesimal minuteness. On the face of it it appears that the effort to exterminate a large insect like the locust or the common house-fly need be but child's play compared to that required to put an end to the existence of any widely distributed species of bacteria. It is a palpable impossibility—would be so even if the thing we sought to destroy had parts or qualities by which it could be easily recognised when seen. ..... Practically speaking, we know it (scarlet fever) only by its effects, that is, when it has produced what we call a case of scarlet fever in the body of an unfortunate person who has become infected by it. Certain wide natural circumstances no doubt depress or stimulate the growth and spread of the germ, so that we get more of it and its results in some seasons than in others, just as in some seasons we get more wasps and flies and locusts by reason of circumstances over which we have no control and which we hardly understand." We have quoted this fully because, in our opinion, Dr. Garrett has succeeded admirably in expressing the view held at the present day by many epidemiologists in a manner which suggests much thought to the reader. We note, too, with interest that Dr. Garrett by no means becomes pessimistic as regards preventive measures, nor is he inclined to regard isolation hospitals with less favour. He recognises, as must all who think upon the subject, that by diminishing the scope of infectivity of any given case we must correspondingly curtail its influence for harm. Because we cannot as yet prevent the occurrence of all fires it would be a dangerous step to dispense entirely with our fire-engines. The Cheltenham public abattoir does not appear to increase much in popularity, but we are glad to see that Dr. Garrett still continues the practice of publishing the names of those butchers who use the abattoir. We should certainly be inclined were we inhabitants of Cheltenham to patronise the abattoir butchers, and we have little doubt that in time to come the public will insist upon their meat-supply being under proper control.

Liverpool Port Sanitary District.—Dr. E. W. Hope, the port medical officer of health, relates that the arrival of the s.s. *Dictator* at Liverpool after she had had cases of plague, or suspected plague, on board on the voyage home raised the important general question as to how far the Collector of Customs is empowered to detain a vessel if such vessel has no actual case of sickness on board at the time of her arrival, and this notwithstanding the fact that the vessel is known to have come from a port infected with plague, and, moreover, that cases of plague, or suspected plague, have recently occurred on board. We are glad to see that, as an outcome of a conference presided over by Dr. R. J. Reece of the Local Government Board, the Customs authorities have undertaken to do everything within their power to prevent any persons arriving at Liverpool from Portuguese ports landing until after they have been medically inspected by the officers of the port sanitary authority. It is clearly in the interests of trade that no undue detention of vessels should take place, but at the same time no risks can be allowed as

regards the importation of plague into this country, and if the powers at present in force are insufficient for the needs of the situation we have little doubt that Parliament would readily extend them were the necessity for such a step apparent. Apart from the case of the *Dictator* we note that during 1899 persons suspected of suffering from plague were removed from four vessels arriving at Liverpool. No definite case of plague occurred. With the view of preventing the introduction of small-pox into Liverpool or Manchester or the districts abutting upon the Manchester Ship Canal a voluntary arrangement has been entered into between the Manchester and Liverpool port sanitary authorities by means of which cases of small-pox occurring on board vessels bound for Manchester will be accommodated in the Liverpool Hospital. As regards the sanitary condition of vessels it is gratifying to learn that the work done by port sanitary authorities is making its influence felt and that fewer defects are being found in the case of vessels frequenting the port of Liverpool. There were, however, 3324 defects discovered on board 3060 vessels during 1899. The emigration taking place from Liverpool is always an interesting subject in Dr. Hope's reports. During 1899 no fewer than 118,568 emigrants left the port of Liverpool. Of this number 82,626 were bound for the United States and 30,337 for Canada, there being amongst those for the United States 39,239 English, 1238 Scotch, and 3839 Irish, and amongst those for Canada 13,474 English, 697 Scotch, and 312 Irish. These figures convey some idea of the English, Scotch, and Irish influences in the United States.

St. Thomas Rural District.—Of the 48 cases of enteric fever which were notified in this district during 1899 nine patients were regarded as having contracted the disease from the consumption of cockles eaten while they were visiting Exmouth with a school treat. The treat took place on August 9th, seven cases of enteric fever being notified on August 28th and 29th and two on Sept. 6th. One of the Exmouth sewers discharges over the sands from which the cockles are collected, and Mr. Mark Farrant, the medical officer of health of St. Thomas, reports that some of these cockles on being examined bacteriologically yielded bacilli coli. The outbreak was clearly part of that which occurred in Exeter and which we noticed in THE LANCET[1] shortly after the Exeter report appeared.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 7119 births and 4509 deaths were registered during the week ending April 28th. The annual rate of mortality in these towns, which had declined from 23·0 to 21·2 per 1000 in the three preceding weeks, further declined last week to 20·3. In London the rate was 19·6 per 1000, while it averaged 20·7 in the 32 provincial towns. The lowest death-rates in these towns were 12·9 in Birkenhead, 14·0 in Newcastle, 14·3 in Burnley, and 15·6 in West Ham; the highest rates were 24·5 in Plymouth, 26·0 in Liverpool, 26·1 in Manchester, and 30·8 in Wolverhampton. The 4509 deaths in these towns included 472 which were referred to the principal zymotic diseases, against 501, 479, and 432 in the three preceding weeks; of these 168 resulted from measles, 132 from whooping-cough, 54 from diphtheria, 44 from diarrhœa, 34 from scarlet fever, 34 from "fever" (principally enteric), and six from small-pox. No fatal case in any of these diseases occurred last week in Birkenhead; in the other towns they caused the lowest death-rates in Croydon, Burnley, Gateshead, and Newcastle; and the highest rates in Plymouth, Cardiff, Wolverhampton, and Oldham. The greatest mortality from measles occurred in Plymouth, Bristol, Cardiff, and Wolverhampton; from scarlet fever in Oldham and Sunderland; from whooping-cough in Birmingham, Norwich, Liverpool, and Oldham; and from diarrhœa in Plymouth and Wolverhampton. The 54 deaths from diphtheria included 20 in London, five in Leicester, five in Leeds, and four in Cardiff. Four fatal cases of small-pox were registered last week in Liverpool, one in London, and one in Cardiff. There were six cases of small-pox under treatment in the Metropolitan Asylums Hospitals on Saturday last, April 28th, against two, three, and four at the end of the three preceding weeks; five new cases were admitted during the week, against two in each of the two preceding weeks. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 1647, against 1713, 1694, and 1676 on the three preceding Saturdays; 170 new cases were admitted during the week, against 185, 189, and 165 in the three preceding weeks. Influenza was certified as the primary cause of 39 deaths in London. The deaths referred to diseases of the respiratory organs in London, which had been 501 and 460 in the two preceding weeks, further declined last week to 411, but were 62 above the corrected average. The causes of 43, or 1·0 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leicester, Nottingham, Salford, Bradford, Hull, and in 15 other smaller towns; the largest proportions of uncertified deaths were registered in Bristol, Birmingham, Liverpool, and Sheffield.

[1] THE LANCET, Oct. 21st, 1899, p. 1169.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had declined from 22·8 to 21·0 per 1000 in the four preceding weeks, rose again to 21·7 during the week ending April 28th, and exceeded by 1·4 per 1000 the mean rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 15·2 in Perth and 16·6 in Leith to 24·0 in Greenock and 24·6 in Glasgow. The 672 deaths in these towns included 24 which were referred to measles, 23 to whooping-cough, 13 to diarrhœa, six to scarlet fever, five to diphtheria, two to small-pox, and two to "fever." In all 75 deaths resulted from these principal zymotic diseases, against 66 and 65 in the two preceding weeks. These 75 deaths were equal to an annual rate of 2·4 per 1000, which was 0·3 per 1000 above the mean rate last week from the same diseases in the 33 large English towns. The fatal cases of measles, which had been 19 and 18 in the two preceding weeks, rose again last week to 24, of which 20 occurred in Glasgow and two in Dundee. The deaths from whooping-cough, which had been 15, 17, and 19 in the three preceding weeks, further rose to 23 last week, and included 14 in Glasgow, four in Aberdeen, and two in Edinburgh. The fatal cases of diarrhœa, which had been 19 and 14 in the two preceding weeks, further declined last week to 13, of which five were registered in Glasgow, four in Aberdeen, two in Edinburgh, and two in Dundee. The six deaths from scarlet fever corresponded with the number in the preceding week, and included five in Glasgow. The fatal cases of diphtheria, which had been three in each of the two preceding weeks, rose last week to five, of which four occurred in Edinburgh. The two deaths from small-pox, which were registered in Glasgow, are the only fatal cases of this disease which have occurred since June last. The deaths referred to diseases of the respiratory organs in these towns, which had been 134 and 145 in the two preceding weeks, declined again last week to 141, but exceeded by 17 the number in the corresponding period of last year. The causes of 30, or more than 4 per cent., of deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 34·3 and 30·4 per 1000 in the two preceding weeks, further declined to 26·5 during the week ending April 28th. During the past four weeks the death-rate in the city has averaged 30·0 per 1000, the rates during the same period being 20·8 in London and 20·4 in Edinburgh. The 178 deaths registered in Dublin during the week under notice were 26 less than the number in the preceding week, and included 8 which were referred to the principal zymotic diseases, against six and 12 in the two preceding weeks; of these, three resulted from "fever," three from diarrhœa, two from whooping-cough, and not one either from small-pox, from measles, from scarlet fever, or from diphtheria. These eight deaths were equal to an annual rate of 1·2 per 1000, the zymotic death-rates during the same period being 1·9 in London and 1·5 in Edinburgh. The deaths referred to different forms of "fever," which had been two and three in the two preceding weeks, were again three last week. The three fatal cases of diarrhœa corresponded with the number recorded in the preceding week. The deaths from

whooping-cough were slightly above the average number in recent weeks. The 178 deaths in Dublin last week included 30 of infants under one year of age and 31 of persons aged upwards of 60 years; the deaths of infants showed a marked decline and those of elderly persons were less than half the number in the preceding week. Eight inquest cases and four deaths from violence were registered, and 68, or more than a third, of the deaths occurred in public institutions. The causes of eight, or nearly 5 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ROYAL NAVY MEDICAL SERVICE.

THE following appointments are notified:—Staff Surgeon James Bradley to the *Colossus*. Surgeons: F. J. A. Dalton and G. E. Macleod to Malta Hospital; G. Ley to the *Surprise*; J. P. Willis to the *St. Vincent*; H. G. T. Major to the *Ramillies*; H. W. M. Rees to the *Isis*; and S. J. Haylock to the *Jaseur*.

IMPERIAL YEOMANRY.

Percival Davidson to be Medical Officer, with the temporary rank of Captain.

ROYAL ARMY MEDICAL CORPS.

Captain William G. Beyts, from the Seconded List, to be Captain, vice M. L. Hughes, killed in action.

INDIA AND THE INDIAN MEDICAL SERVICES.

The Queen has approved of the following promotions among the officers of the Indian Medical Service:—Lieutenants to be Captains: Andrew Augustine Frayne McArdle, Jasper Maxwell Woolley, Clayton Arbuthnot Lane, Thomas Bernard Kelly, James Henry Hugo, D.S.O., William Hamilton Kenrick, Charles Henry Watson, Charles Hope Septimus Lincoln, Raymond Herbert Price, Edgar Francis Eardley Baines, Geoffrey Orr Fern Sealy, and Reginald Bryson. The Queen has also approved of the retirement from the Indian Medical Service of the undermentioned officers (Bengal Establishment): Lieutenant-Colonel Andrew Deane and Lieutenant-Colonel Christian Bernard Hunter.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain Simon Linton to be Surgeon-Major, and Surgeon-Lieutenant Charles F. Spinks, 1st Dumbartonshire Volunteer Rifle Corps, to be Surgeon-Lieutenant.

VOLUNTEER CORPS.

Rifle: 5th (the Hay Tor) Volunteer Battalion the Devonshire Regiment: Surgeon-Captain E. Haydon to be Surgeon-Major. 3rd Volunteer Battalion the Bedfordshire Regiment: Surgeon-Lieutenant J. W. Bone to be Surgeon-Captain. 2nd Volunteer Battalion the Royal Welsh Fusiliers: Surgeon-Major E. Williams, from 1st Lancashire Royal Engineers (Volunteers), to be Surgeon-Major. 4th Volunteer Battalion the Cameronians (Scottish Rifles): Andrew Francis Wilson Gunn to be Surgeon-Lieutenant. 5th (West) Middlesex: Surgeon-Lieutenant C. E. Goddard to be Surgeon-Captain. 4th (Stirlingshire) Volunteer Battalion Princess Louise's (Argyll and Sutherland Highlanders): Surgeon-Lieutenant J. G. Ronald to be Surgeon-Captain.

VOLUNTEER MEDICAL STAFF CORPS.

The Manchester Companies: Wilfred Steinthal to be Surgeon-Lieutenant.

ARMY MEDICAL SCHOOL, NETLEY.

Owing to the exigencies of the public service caused by the war in South Africa, special examinations were held in the Army Medical School on April 24th and 25th. The following officers having satisfied the examiners are recommended for commissions as lieutenants in the Royal Army Medical Corps. These officers reported themselves at Aldershot on May 1st:—

ENTERED THE ARMY MEDICAL SCHOOL BY EXAMINATION.

1. T. Biggam.
2. H. Richardson.
3. W. L. Baker.
4. F. W. Cotton.
5. F. M. Parry.
6. B. R. Dinnis.
7. J. S. Twigg.
8. W. J. P. Adye-Curran.
9. J. Fowell.
10. R. L. Argles.
11. J. G. Foster.
12. F. G. Ford.
13. J. Walker.
14. M. Purser.

NOMINATED BY THE SECRETARY OF STATE FOR WAR AS SURGEONS-ON-PROBATION.

1. W. Bennett.
2. P. G. Stock.
3. H. B. Fawcus.
4. T. E. Fielding.
5. E. P. Sewell.
6. C. H. Straton.
7. B. S. Bartlett.
8. R. T. Brown.
9. G. Carroll.
10. D. O. Hyde.
11. A. E. H. Hamerton.
12. G. J. Houghton.
13. J. G. Churton.
14. W. D. Waring.
15. T. H. Stevenson.
16. J. M. Cuthbert.
17. F. McLennan.
18. A. F. Weston.
19. J. Dorgan.
20. C. H. Furnivall.
21. J. H. Robinson.
22. F. G. Fitzgerald.

A second batch of surgeons-on-probation for the Royal Army Medical Corps, whose names we give below, have been nominated by the Secretary of State for War. These gentlemen reported themselves at Netley on May 1st to go through a course of instruction in the Army Medical School:—

G. Baillie.
W. Bennett.
B. B. Burke.
W. S. Crosthwait.
P. C. Douglass.
R. F. Ellery.
W. B. Fry.
A. R. Greenwood.
P. H. Henderson.
A. D. Jameson.
D. W. K. Moody.
J. P. Murphy.
L. R. Popham.
C. R. L. Romayne.
W. B. B. Taylor.
L. L. G. Thorpe.

TRANSVAAL WAR NOTES.

The *Times* states that on Friday, April 27th, Major Greene, R.A.M.C., on his return from Ladysmith was received at Glanworth with musical demonstrations and a torchlight procession was formed in his honour.

Surgeon C. M. Beadnell, R.N., and Surgeon J. G. Fowler, R.N., were among the officers of the *Powerful* who were present at the inspection of the Naval Brigade by the Queen at Windsor on Wednesday, May 2nd.

We announced last week that Major Babtie, R.A.M.C., had had conferred upon him by Her Majesty the Victoria Cross. Major W. Babtie is a Scotsman, the son of Mr. J. Babtie, J.P., of Dumbarton. After finishing his education at Glasgow University he joined the army in 1880 and served in India, Malta, and Crete. For a year he acted as senior medical officer in the latter island and received the C.M.G. for his services in connexion with the international occupation of Crete.

TRANSVAAL WAR CASUALTIES.

Civil Surgeon Whicher died from enteric fever at Mooi river on April 27th.

Major M. W. Kerin, Lieutenant Martin, and Lieutenant Sloan, officers of the Royal Army Medical Corps, wounded, have arrived in the *Nubia* at Southampton.

DEATHS IN THE SERVICES.

Lieutenant-Colonel John Alexander Scott, R.A.M.C., suddenly, at Nahun, Sirmur State, Punjab, on April 4th. He entered the Service in 1859, was promoted surgeon in 1873, surgeon-major in 1875, and brigade-surgeon in 1885, and retired in 1890. He served in the New Zealand war of 1861-62 and the South African War (Transvaal Campaign) of 1881.

Fleet-Surgeon Joshua Pasley Courtenay, late R.N., died on April 8th. He joined the navy in 1860, was promoted staff surgeon in 1872, fleet surgeon in 1882, and retired in 1890.

Correspondence.

"Audi alteram partem."

"INTERNAL DERANGEMENT OF THE KNEE-JOINT."

To the Editors of THE LANCET.

SIRS,—I have read with great interest Mr. Edmund Owen's clinical lecture upon Internal Derangement of the Knee-joint and I beg to congratulate him upon the success of his operation. His lecture contains many very valuable remarks and suggestions and also some statements which I should like to criticise. Seventeen years ago I published an account of several cases of this affection which had come under my care, in all of which the application of the plan devised over 100 years ago by William Hey of Leeds had been successful in curing the patients. Since that time I have met with a considerable number of similar cases, nearly all of which

have been cured by these manipulations without recourse to a cutting operation. I cannot state at the present moment how many such patients I have dealt with, but I should think at least 30 and probably more.

In THE LANCET of June 13th, 1891, you were good enough to publish an article by me upon this subject, in which I gave the subsequent histories of the patients whose cases I had recorded eight years previously, showing that the treatment had been permanent in its effects. I do not assume that all cases of internal derangement of the knee-joint can be cured without operation—in fact, it seems evident from certain recorded post-mortem examinations of such joints that open operation must sometimes be necessary, nor do I suggest that in Mr. Owen's case any other treatment than that which he adopted would have been successful. I simply wish to controvert his statement that nothing short of a cutting operation will put such a knee right. The only alternative treatment which he refers to is "the use of splints, knee-trusses, and pads, or retentive apparatus," and further he remarks that such treatment would cripple the limb and interfere with exercise. The treatment which was successful in a large number of cases in the hands of William Hey, and following him Samuel Smith, both of Leeds, and Samuel Hey (grandson of William), Astley Cooper, Syme, and Sir Benjamin Brodie does not involve fixation of the joint, or at least in my experience fixation of the joint is not necessary. On the contrary, I have found that when the cartilage seems to have slipped back into its place after manipulation we can allow the patient to walk about, simply cautioning him to avoid any careless lateral movements. In a few cases I have used temporarily a light apparatus which allows perfect freedom for flexion and extension of the leg but checks any lateral movement. This apparatus was, I believe, devised or at least used by the late Sir James Paget.

Mr. Owen's excellent remarks upon the seriousness of the operation which he advocates should, I think, induce surgeons to give a thorough trial to manipulative treatment before resorting to a serious operation. There exist undoubtedly many instances in which new growths have formed in the joint or in which so much damage has been occasioned that an operation is imperative, but there is, I contend, ample evidence to show that in the majority of cases of displacement of the internal semilunar cartilage a milder and perfectly safe treatment by manipulation will effect a cure. It must, however, be understood that replacement by one manipulation, if it can be effected, is not sufficient to cure the case. Passive movements of the knee-joint must be repeated again and again, probably for several weeks, to ensure the retention of the cartilage in its normal position.

I am, Sirs, yours faithfully,

NOBLE SMITH.

Queen Anne-street, London, W., April 30th, 1900.

"THE FOUR-THOUSANDTH NUMBER OF THE LANCET."

To the Editors of THE LANCET.

SIRS,—The four-thousandth number of THE LANCET comes to me with especial interest, for my father, brother, and myself have never missed a number since its commencement. This is a fact that I think few members of our profession can record, or that a father and two sons should have been in daily practice in the same town for a space of 87 years—10 years before the first number of THE LANCET appeared. I am, Sirs, yours faithfully,

H. GEARY DYER, M.D. Durh.

Ringwood, Hants, April 30th, 1900.

"THE NITRO-PROPIOL TEST FOR SUGAR IN URINE."

To the Editors of THE LANCET.

SIRS,—Since you drew attention to the above test in THE LANCET of Feb. 17th, 1900, I have largely experimented with nitro-propiol and there can be no doubt that the reaction is of a most striking and convincing nature. As Dr. Saundby in his letter on the same subject has pointed out, Fehling's solution is reduced by a number of other bodies besides sugar, and it would hardly be safe to pronounce a patient to suffer from glycosuria upon this test alone without resorting to control tests. There is only one body which is liable to interfere with the nitro-propiol reaction (viz., aldehyde) and this body is not a constituent of the urine; nitro-propiol therefore seems to be particularly appropriate for the qualitative determination of sugar in urine. Whether aldehyde was formed by the filtration of the urine through animal charcoal in the case which Dr. Saundby refers to in his letter is a question to be considered. Nitro-propiol will indicate such small percentage of sugar which entirely escapes observation in the fermentation test and which can only with difficulty be proved by the phenylhydrazine or the osczone test respectively. The importance which must be placed upon the minutest waste of sugar in the body, if it occur regularly and not temporarily, should render nitro-propiol a most valuable reagent. I do not agree with the directions for the application of the test as given on the labels. Diabetic urine or even a very dilute solution of glucose (I have experimented with solutions containing 0·05 per cent. of glucose only) produces the reaction within 30 or 40 seconds after the tablet has been dissolved and after the test liquid has reached the boiling point. Continued boiling for from three to five minutes is, therefore, not a compulsory, but only a precautionary, measure for proving the absence of sugar. The propiol test can just as well be carried out in a test-tube as Fehling's test (I use a larger size tube, holding it by a paper loop), because the reaction is almost an instantaneous one, in case of diabetic urine, whilst in cases of non-diabetic urine gentle boiling for a few minutes is quite sufficient to prove the absence of sugar. The complete absence of the distasteful odour developed by Fehling's test is another point in favour of propiol. As the new test will meanwhile have attracted considerable attention I am looking forward with interest to the expression of further opinions on the subject. My belief is that it will prove a boon to the general practitioner on account of its simplicity, reliability, and stability.

I am, Sirs, yours faithfully,

Lee, S.E., April 24th, 1900. BRYCE GORDON.

TYPHOID FEVER IN THE SOUTH AFRICAN FIELD FORCE.

To the Editors of THE LANCET.

SIRS,—When General Buller entered Ladysmith he saw a cemetery containing no less than 700 graves of men who died from enteric fever. In other parts of Africa the disease has given rise to an equally large mortality. Hundreds of our men were inoculated with anti-typhoid serum before leaving home. Are there any statistics or reliable facts to be obtained yet which bear on the relation between cases of the disease and the number of inoculations made? In some cases whole regiments were injected to a man, and as records of the cases of enteric fever are kept we should be in a position to judge somewhat of the value of the anti-typhoid serum. I am, Sirs, yours faithfully,

MARTYN WESTCOTT, L.R.C.P. Lond., &c.

East Suffolk Hospital, Ipswich, Suffolk.

NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

The Unhealthiness of Assam.—The Health of British Troops in India.—Spurious Typhoid Fever.—The Plague in Calcutta and Bombay.—The Pasteur Institution of India.

THE extraordinary unhealthiness of some parts of Assam which was lately commented upon by the Viceroy is fully detailed in the last administration report. In the Surma Valley, which is estimated to contain about 2,500,000 people, there were only 75,000 births in 1898, but 94,000 deaths. Also in the Assam Valley there were only 71,031 births, while there were registered 85,000 deaths. There was a decline in the birth-rate throughout the province. This is attributed to the outbreak of malarial (?) fever added to the privations endured subsequently to the earthquake. The most unhealthy district was Nowgong, which had a birth-rate of 18·66 per 1000, while its death-rate was 47·25. There is little doubt that defective registration largely accounts for these low birth-rates, but the death-rates are probably very near the mark. Ordinary fever and cholera showed a decline, but the disease known as kala azar is reported to have carried off 16,000 victims.

The annual report of the Sanitary Commissioner with the

Government of India for 1898 has just been issued. The most striking fact is the large amount of sickness which has been prevalent amongst the British troops. The year as a whole is said to have been a healthy one, the death-rate amongst the general population being only 27 per 1000 as compared with 35 per 1000 for the previous 12 months. A very marked improvement occurred in the jails where the death-rate sank from 38 to 25 per 1000. In the native army the death-rate was only 13 per 1000, a still further improvement from the previous years. As I have pointed out before, the invaliding among the British troops was terribly high in 1897, and in 1898 it was still higher, having risen to 58 per 1000. The death-rate, however, declined from 22 to 20 per 1000. It is extraordinary why this mortality should have occurred during 1897 and 1898 when the death-rate in 1896 was only 15 per 1000. The chief causes of death amongst British troops were enteric fever, hepatic abscess, and heat-stroke.

The enormous increase of enteric fever calls for urgent and full inquiry. In this connexion the views of Major Spencer may be referred to. Writing in the *Indian Medical Gazette* he expresses the opinion that there is besides true enteric fever a fever with enteric symptoms which differs considerably from the classical type. He mentions these differences between the two classes of cases. The Widal test often fails in these spurious cases of typhoid fever, the mortality is higher (25 per cent. as compared with about 8), the temperature chart shows much greater irregularity of fever, the onset is often sudden, a rash is generally absent, the abdominal symptoms are often absent or but slightly marked, the typical typhoid state is often vague or altogether absent, and the illness is generally longer in duration. The differences in post-mortem appearances are asserted to be that in the spurious form the ulceration is not found limited to the glandular structures but is irregular and extensive. Whether these observations be accurate and whether they will be subsequently confirmed does not alter the fact that there has been a great increase during the past three years of this disease amongst the British troops and that the mortality from it is more than double what occurs at home. Very little typhoid fever is reported either in the native army or among the native population generally, but that it does occasionally occur is undoubted. Notwithstanding improved sanitation in all the cantonments and great care over the water-supply no improvement follows. There must be other causes at work for the discovery of which special investigations are called for.

Plague is still ravaging India from one end to the other. Bombay has a death-rate of 156 per 1000 per annum and Calcutta one of 109·7. The two outbreaks are much in the same stage; the maximum mortality has apparently been reached in each city and there are indications at both places that the disease will soon begin to decline. While, however, the mortality from plague in Calcutta during the present outbreak has so far probably not exceeded 5000, the number of deaths from this disease in Bombay city must have reached 20,000. The outbreak in Bombay has been of longer duration, more extensive, and more virulent, and has recurred in a larger population. The general mortality last week was 2463; in Calcutta 1434. I regret to see that the figures of plague are mounting up almost daily at Karachi, the total number of cases and deaths from the commencement of the fourth epidemic there amounting to 921 and 667 respectively.

The honorary secretary of the Pasteur Institution of India announces that steps are now being taken to establish the Anti-rabic Institution, for which funds have been provided by private subscription, at Kasauli. A thoroughly competent officer is reported to have been appointed and it is hoped that it will be found possible to commence operations this season. Funds are asked for to provide for its maintenance, sufficient being already available for its establishment.

April 5th.

The Plague in India.—The Extent of the Famine.—The Indian Census for 1901.

Over 5000 deaths occurred from plague in India during the week ending April 7th and these figures do not fully represent the total mortality. The chief places which suffered are Patna (2058), Calcutta (897), Bombay (706), Saran (307), Karachi (283), Cutch State (299), Thana (95), and Monghyr (85). The epidemic is subsiding in Calcutta and Bombay but is increasing rapidly at Karachi. In the Patna district it is still raging fiercely. A comparison of the published figures for the two cities of Calcutta and Bombay is instructive. Bombay had 2397 deaths from all causes last week, which with a population of 821,000 gives a death-rate of over 150 per 1000 per annum. Its average weekly mortality is about 600 and from this enormous excess it returned but 706 deaths from plague. It would be interesting to know how the authorities account for the 1000 remaining deaths. Calcutta, on the other hand, had 1434 deaths from all causes and having a population of 649,000 the death-rate was 109·5 per 1000. The average weekly mortality is 657, so that the excess of deaths was 777. The returns of plague deaths (897) were thus rather more than the excess in the mortality, and this is explained by the reduction from the usual mortality under other heads. In Calcutta, therefore, all the deaths were accounted for. In Bombay 1000 deaths must have been incorrectly registered. Allowing 100 or even 200 deaths from an increase in other diseases it must be admitted that these returns from Bombay are extremely unsatisfactory. Since the above figures were published considerable improvement in the mortality has occurred in both cities, and judging from previous experience we may expect to see a rapid decline at both places.

The famine still continues. Nearly 5,000,000 people are under relief, and increased distress is reported from the Bombay Presidency and from the Central Provinces. About 3,500,000 are being helped by charity or work in the British provinces and about 1,500,000 in certain Native States. The organisation of relief works is very extensive and many considerable operations of great utility are being carried out. Famine cannot exist without many deaths, but the loss of life is small compared with previous occasions.

The census for India will be taken on the night of Friday, March 1st, 1901. This date has been selected because the moon will be nearly full (March 5th) and there will be light to enable the enumerators to check the schedules before midnight. Other reasons given are that the people do not usually at that date go to the sacred rivers to bathe and that festivals and auspicious days for marriage will also be avoided. These considerations would hardly be thought of by the authorities at home. In some forest and desert tracts synchronous enumeration will be impracticable so that some of the places may have to be taken on the morning of March 2nd. Certain points of information will be obtained from the whole of India, but other particulars will be left to the local governments to please themselves about. For example, sex, age, civil condition (married, unmarried, or widowed), birthplace, and caste will be everywhere inquired for, but religion, occupation, language, and ability to read and write will be left to the local governments to arrange for. It has been decided that among the Christian population the different sects shall be recorded, but the calculation of non-Christians depends upon local authorities. The important heading of caste has been retained because "the whole social fabric of India rests upon caste," and the caste statistics show the progress of what has been described as the gradual Brahmanising of the aboriginal non-Aryan or casteless tribes. In India the occupation census is extremely difficult, as the people give very vague descriptions and the industries are not sufficiently specialised. Amongst other headings there is a column provided for those who know English.

April 12th.

THE LATE MR. W. F. CARTER.—Mr. William Fitzwilliam Carter died at his residence in Coronation-road, Bedminster, Bristol, on April 26th, from typhoid fever, in his sixtieth year. Mr. Carter received his medical education at the school of the Royal College of Surgeons in Ireland and became qualified as L R C.P. Irel. in 1863; two years later he was admitted L R.C.P. & L M. Edin. Mr. Carter was for a short time in practice in Brisbane, Australia, where he was honorary physician to the Lady Bowen's Hospital, and on his return to England he settled at Bedminster. He was formerly district medical officer and public vaccinator for Bedminster and was only quite recently granted a superannuation allowance by the Bristol Board of Guardians. Mr. Carter was also formerly medical officer of health of Bedminster and medical officer to the Bedminster Fever Hospital. He had an extensive practice in Bedminster, where his kindly disposition and genial manners made him extremely popular, and where, as well as in Bristol, great sympathy is felt for his widow and children.

UNPACKING AT THE PARIS UNIVERSAL EXHIBITION.

THE INTERNATIONAL MEDICAL PRESS CONGRESS.

(FROM OUR SPECIAL CORRESPONDENT.)

THOUGH a number of interesting objects are now unpacked and actually placed in the glass cases ready for view, it not unfrequently happens that the exhibitors have found it more prudent to cover these over with sheets of white paper or calico. The fact is that a peculiar and most penetrating white dust pervades the whole Exhibition. It seems to be composed mainly of pulverised plaster, and people, on leaving the Exhibition, appear as if they had been visiting a flour mill. In the surgical and medical section the cloud of white dust is especially thick, for the ornamentation of the outer walls and small buildings near the entrances are not yet finished, and it is the stone-masons and the plasterers who produce much of this dust. Then the crowds raise and stir up this dust. With their feet they pulverise the larger particles so that it more easily floats about in an impalpable form. Exhibitors despondently stand watching and wondering when these white dust-clouds will subside and they do not feel inclined to unpack their treasures in its midst. Still some among them seem to grasp the fact that if everyone is going to wait till everyone else is ready then no one will ever be ready. Now that a few exhibitors, in spite of the white dust, have their stalls ready their neighbours and rivals will feel compelled to follow suit. Surgery and medicine are comprised within Group III., which is devoted to sciences and arts, and they constitute Class 16, so that anatomical specimens, for instance, are not far from musical instruments or from the exhibits of the various universities, &c.

Thus among the first to unpack were the Publishers' Association of Great Britain and the Oxford University Press, with the Kay Scheerer Company, surgical instrument and furniture makers of New York, as close neighbours. The British Publishers' Association has a very rich and artistic collection of printing and also display the title-pages of a great number of British periodical publications, including, of course, THE LANCET; while the Oxford University Press distinguishes itself especially by the rich and artistic character of its bookbinding. Now it is just by the side of these publications that will be found the only exhibit of American hospital furniture and surgical instruments. It is true that this is in itself a very large and representative exhibit. Everything is aseptic, only metal and glass is employed. For instance, there is a washstand for hospital use made of thick glass. A cup shaped basin of larger circumference than the hole under which it is placed is so contrived that it is not likely to be touched by the hands. From above hot or cold water is made to descend by pressing a pedal with the feet, thus the surgeon and nurse wash their hands without touching the sides of the basin or the tap. In the water-tanks above steam can be discharged so as to sterilise the water. Close by there is a new model operating-table devised by Dr. Clement Cleveland of New York. It is divided transversely into three moveable parts and also lengthways down the centre, thus six moveable pieces of glass fitting to a metallic frame-work constitute the bed. Handles attached to crank wheels facilitate a great variety of movement and there are shoulder-straps to keep the patient from slipping. Another table, also of glass but with different mechanical contrivances for moving its various parts, is shown by Dr. H. J. Boldt of New York. There is further a very ingenious bath that can be wheeled up to a patient's bedside. A thin enamelled metallic slab is passed under the patient as he lies in bed and he is thus lifted without being disturbed and placed on a sort of cradle that is suspended above the water from two short poles or masts at each end of the bath. Then by a pulley arrangement the patient is slowly lowered into the water. In the same manner he is lifted out of the water and placed back into the bed, and throughout he has not been disturbed, but has continued to remain in a reclining position. Among the surgical instruments Dr. Ernest Laplace of Philadelphia shows a set of anastomosis forceps which seem new and ingenious, and Dr. Howard A. Kelly of Baltimore a complete set of endoscopic instruments.

These are on the ground floor, and for some reason or other difficult to explain it is necessary to go up to the gallery above to find similar exhibits from French manufacturers. It is true that according to the map Class 16 should be in the gallery at the extreme end of the westerly wing of the main building close to the Eiffel Tower. But then, why is the American hospital furniture &c., on the ground floor? Among the French exhibitors the well-known firm of Dupont, rue Hautefeuille, alone has ventured to unpack. Others will follow suit shortly. The chief feature of these exhibits is the ingenuity with which what appears to be an ordinary and handsome piece of furniture—an armchair or a sofa—can promptly be converted into an operating-table. The back of the armchair, for instance, falls over the seat and becomes a table or bed on which the body of the patient can be placed, while from the sides arms protrude to hold the feet, and from underneath there are steps that can be pulled out for the patient to ascend. Then there is also a great show of moveable chairs for invalids, some being arranged with longitudinal divisions so that each leg may be placed at a different inclination, or one division can be removed altogether, leaving a leg quite free, while the other is bolstered up. The wheels are now surrounded with pneumatic tyres so that the patient is moved along with great comfort. Near at hand there are some very fine anatomical wax models. But, as already observed, these exhibits are very much mixed, thus the next things are some beautiful photographs of the moon, &c., taken at the Paris Observatory, which, though interesting, are a very different matter. Then a little further on it will be seen that nationalities as well as subjects are mixed up, for there is here an extensive display of the maps of the geological survey of the United Kingdom and specimen charts of the London Meteorological Council. Underneath the mural exhibits and in cases, are the scientific instruments used at the Inland Revenue Department of Somerset House and exhibited by Professor T. E. Thorpe, F.R.S., the electrical pyrometer by Mr. Robert Austin and photometers for testing the illuminating power of gas. Then a step further there is a large compartment where German optical instruments are being unpacked, and next to it is another large compartment which in time will be full of German surgical instruments. By way of contrast and just on the other side of the passage, Japan displays charts to show how much the use of the telegraph, the telephone, postage stamps, postal orders, &c., have increased in that country during the last few years. From Japanese postal communication a step further brings the visitor to a little room, so arranged as to be built within a larger room, for the treatment of small-pox with red light. The walls are of course wooden partitions roofed over with red transparent canvas, and the window is covered with red material. The influence of red light tends to prevent, it is maintained, the pitting produced by small-pox. By the side of this is the exhibit of the Finsen Medical Institute, of Denmark. With prisms and a sort of telescope Dr. Finsen decomposes the direct rays of sunlight in such a manner as to exclude the red. Photographs show how, in the garden of this institute, the nurses throw the ray of light from which the red has been excluded on to the face of patients suffering from lupus. On the walls are suspended life-size photographs of a number of patients taken before and after this treatment, and, to judge from these photographs, the results were certainly very favourable. After contemplating these cases of lupus from Denmark there come the veterinary schools of France—those of Alford, Lyons, Rheims, and others—with very fine wax anatomical models of the diseases of horses and other animals. Thus there is no lack of variety in this part of the exhibition; indeed, the difficulty is to keep to one subject for more than five minutes at a time.

The extremity of the opposite, or easterly, wing of the main building on the Champs de Mars is more advanced; more exhibits are unpacked, though it must be confessed that they are not likely to be spoiled by the dust, and this may account for the difference. Here are the exhibits comprised in Group XI.—namely, mines and metallurgy.

To illustrate how public health questions turn up in all directions the exhibits of the great Anzin Coal-mining Company are well worth a visit. Apart from what relates to the getting of coal, carboniferous geological formations, &c., there is a chemical department where the method of analysing the atmosphere within the mines is shown. Then, on another

table, a small cube of coal two centimetres in dimensions is shown. Next to it there is a round glass ball about four inches in diameter, and this indicates the volume of choke-damp which the little piece of coal could produce. A second and much larger glass globe shows the amount of air needed for combustion in proportion to the piece of coal. Finally, a third glass globe very much larger represents the actual amount of air pumped into the Anzin mines. These models are in the same ratio to each other as the quantities occurring in actual practice. Then we have the written explanation that a cubic metre of coal at Anzin can produce 47·5 cubic metres of choke-damp, but that 11,833 cubic metres of air are supplied to dilute the poison. Thus in 1897 the output of coal at Anzin was equal to 255,388 tons, which could have produced 10,091,520 cubic metres of choke-damp weighing 7246 tons. The company sent down into the mines during that year 2,522,880,000 cubic metres of air, weighing 3,027,456 tons. Thus to get one ton of coal up it is necessary to pump down from 15 to 16 tons of air. Fortunately it is easier to move air than coal. Further, it is calculated that if the choke-damp could be utilised the amount mentioned above for the year 1897 at Anzin would have sufficed to feed continuously 28,000 Auer burners or to melt and to bring to boiling point 15,000 kilogrammes of glass per hour. These figures eloquently demonstrate the close connexion between industrial and public health problems.

THE INTERNATIONAL CONGRESS OF THE MEDICAL PRESS.

The proposal to hold an international congress at which the editors, contributors, and proprietors of medical periodical publications should be represented has attracted a good deal of attention on the continent and has met with a large measure of support. Perhaps it is that the position of the medical press in England is very different from that which prevails in other countries; in any case England is the only important country which has taken no step whatever in order that its medical press may be properly represented on this occasion. The idea of holding this Congress was first brought forward by Dr. Marcel Baudouin and Professor C. Posner of Berlin at the International Medical Congress held at Rome in 1894. Some of the medical journalists present at Rome had conceived the idea of an international association of the medical press, which, among other things, would seek to facilitate the work of medical journalists at medical congresses. Then Dr. Dobrzychi proposed at the Congress at Rome that there should be a special medical press section at the general international medical congresses. A committee was constituted to study the matter, consisting of representatives of l'Association de la Presse Médicale Française and of the Freier Verein der Deutschen Medicinischen Fachpresse, which was to have met in Brussels in 1896. This meeting, however, was postponed till the close of the assembly of the General Medical Congress at Moscow in 1897. The distractions were then so numerous and complicated and the members of the press were so scattered in different directions and had so much professional work to do that they had to content themselves with postponing the whole business to the Paris Exhibition of 1900. Consequently in November, 1897, the Association of the French Medical Press decided to convoke an international congress of the medical press to be held just before the general International Medical Congress.

Since the Medical Congress at Rome the original idea has somewhat developed. It is no longer merely a question of organising for the successful reporting of the proceedings of medical congresses. Following the example given by journalists belonging to the political press, it seemed that an international agreement would tend to protect and promote the moral and material advantages of medical journalism. Literary scientific property could be better protected by the holding of periodical congresses. The Congress which it is now proposed to convoke will be the first effort of the sort, and subjects will be discussed internationally for the first time. Therefore the agenda, it was felt, should be reduced to the simplest expression, leaving the field open for further developments as necessity might arise. Thus there are only two subjects on the agenda: (1) the advisability of founding an international association of the medical press and the conditions on which such an association should exist; and (2) the application of the principle of the protection of literary property to medical literature.

On the first question reports will be presented by Dr. Laborde of Paris, Dr. C. Posner of Berlin, and Dr. Rubino of Naples. These reports will be published before the meeting of the Congress and distributed to all the members. Dr. de Maurans, of *La Semaine Médicale;* M. Rochet, Advocate at the Court of Appeal and legal adviser of the Association of the French Medical Press; and M. Pouillet of the Order of Advocates, will report on the second question and their reports will also be published in advance.

Other questions have also been suggested for discussion, such as the unification of medical technical terms; the extension to members of the medical press of certain privileges accorded to members of the political press; a better understanding as to what constitutes a legitimate quotation; the principle which should govern exchanges of papers; the representation of medical papers in foreign countries; and the part of the medical press in the organisation and preparation of medical congresses. Such is the general programme. The organising committee has for its President Professor Cornil, Member of the Senate; for Vice-Presidents Dr. Lucas-Championnière and Dr. Laborde. Dr. Cézilly is Treasurer and Dr. R. Blondel, 8, rue Castellane, Paris, is the General Secretary.

The Congress will meet on July 26th and will last for three days. All proprietors, editors, sub-editors, and members of the staffs of all medical periodical publications, together with the legal advisers attached to such publications, are admitted as members of the Congress on the payment of an entrance fee of £1. The families of such members and medical men and medical students may also attend as spectators on payment of an entrance fee of 8*s*. They will participate in all the fêtes and receptions but not in the discussions and votes of the Congress. Speeches may be delivered in German, French, or Italian, and there will be meetings in the morning and in the afternoon. More than 50 French medical publications have appointed members of their staffs as members of the Commission of Organisation for this Congress. Committees of organisation for the Congress have also been formed in Germany, Italy, Spain, and the United States of America. Professor Virchow is the honorary president of the German committee, which seems to comprise Austria as well, for the names of Dr. Adler of Vienna and Dr. Herrnheiser of Prague are included in the list. For Italy Professor Baccelli is honorary president, and Professor L. M. Bossi of Genoa acting president. Dr. Valldor is the president for Spain. The Association of American Medical Editors has nominated 10 of its members to form the American committee, together with five members of the American Medical Publishers' Association and five members of the Medical Press Club of the Mississippi Valley.

More important than the formal programme of the International Congress of the Medical Press is the social concourse of so many persons of different nationalities concerned with this phase of journalism. For 10 years or more the desire that such a meeting should take place has been expressed, and now there is a good opportunity to realise this wish. As matters now stand it is proposed to receive the members of the Congress in an official manner at the Pavilion of the Press on the Exhibition grounds. A lunch will follow. This is to take place on Thursday, July 26th. On the mornings and afternoons of the following Friday and Saturday the Congress will meet at the Ecole de Médecine. The evenings of Thursday and Friday are to be given over to private hospitality, but on the Saturday there will be a banquet of the entire Congress to be followed by a grand reception given by the Paris Municipality at the Hotel de Ville. The intervals between the meetings of the Congress and these entertainments are to be employed in visits to the Bibliographical Medical Institute of M. Marcel Baudouin and the special folding and colour printing machines employed by *La Semaine Médicale*, and other installations that are of technical interest to medical journalists.

It is, however, difficult to understand why a most inappropriate date has been selected for the meeting of this Congress. The journalists who attend the International Congress of Deontology or Medical Ethics will be busy with that congress up to July 28th. Those who are to attend the International Medical Congress which is to meet on August 2nd will not have arrived in Paris on July 28th. Why run the Medical Press Congress during the last three days of the Deontological Congress when there are four clear days vacant after the Deontological Congress has terminated and before the International Medical Congress begins—namely, July 29th, 30th, and 31st, and

August 1st? The medical journalists wish to organise. Well and good, but so do the medical practitioners. Why should the medical journalists hold their congress just at a date when it will injure the efforts of the medical practitioners? If they meet during three out of the four following days they will not clash with any other congress and it will be more convenient for those who are going to attend the International Medical Congress. Indeed, it would thus be possible to be present at all the four most important congresses—namely, Medical Ethics or Deontology from July 23rd to the 28th; the Congress of the Medical Press from, say, July 30th to August 1st; the International Medical Congress from August 2nd to the 9th; and the Congress of Hygiene from August 10th to the 17th. This seems so simple and easy a solution of the difficulty that it is to be hoped that the organisers of the Congress of the Medical Press will see their way to alter their date of meeting from July 26th to the 29th or 30th.

THE FATAL ACCIDENTS.

Though the fatal accident which occurred close to the Exhibition on Sunday has elicited the most varied, and in some cases the most abusive, complaints and criticisms no one has suggested that the ambulance service was in any way deficient. A sort of field hospital was very promptly organised in an adjacent building and ambulance wagons were on the spot in good time to remove the nine injured persons to the hospitals or to their private homes after their wounds had been dressed. The same may be said with regard to the second and more blameworthy accident which occurred on Monday. Four workmen were decorating the ceiling of the Hall of Festivals in the great Machine Gallery. This was inside and not, as in the other case, outside the Exhibition, and yet it would appear that the plank of the scaffolding on which these four men stood was of bad or rotten wood; it snapped, the four men fell, and two of them were killed on the spot. The third victim died subsequently and the fourth is under treatment. The chief of the medical service of the Exhibition, Dr. Gilles de la Tourette, was at once called and arrived in time to be able himself to dress the wounds. While deploring such accidents it is in any case some satisfaction to know that prompt surgical assistance was at hand.

To facilitate communications there are so many small bridges for pedestrians in and about the Exhibition that fears of another collapse may very naturally be entertained. Yet, on looking more closely into the matter, it will be seen that this is not at all likely to occur. The bridge in question was not in use. There was no one on it. It was meant to connect a big side show called the Celestial Globe with the Exhibition which is on the other side of the broad Avenue de Suffren. This show will not be completed before June 15th, and there were boards on both sides to prevent access to the bridge. It is against the law to allow anyone on a bridge before its security has been officially tested. Evidently the supports of the bridge had been removed before the cement was sufficiently dry or bad materials had been employed. In any case there was no one on the bridge, it collapsed of its own accord. Only as it was a fine holiday afternoon there were many persons passing underneath at the time and nine were injured and eight killed. The test for bridges in France is that they shall bear an overcharge or load of 400 kilogrammes per square metre of surface. But as great crowds are expected at the Exhibition this test has simply been doubled. It is calculated that, however great the crush, it is simply impossible for more than from six to seven persons to stand within one square metre. Even if these seven persons each weighed 70 kilogrammes this would only amount to 490 kilogrammes per square yard, and no bridge is open to the public at the Exhibition which has not been tested for 800 kilogrammes per square metre of its surface. There is consequently no need to fear that these bridges will give way under the crowds that are likely to pass over them.

Paris, May 1st.

THE MEDICAL GOLF TOURNAMENT.—This tournament will be played on May 10th at Wembley by kind permission of the Wembley Club. The condition will be one medal round of 18 holes. There will be senior and junior classes. Entries, with 5*s.*, should be sent to Mr. Creasy, Windlesham, Surrey, by May 7th.

GERMAN CONGRESS OF INTERNAL MEDICINE.

(FROM OUR BERLIN CORRESPONDENT.)

THE Congress of Internal Medicine was opened in Wiesbaden on April 18th by the President, Professor VON JAKSCH of Prague.

Treatment of Pneumonia.

Professor KORANYI (Budapest) read the first paper, his subject being the Treatment of Pneumonia. He said that the differences in the symptoms of pneumonia were not caused by differences in the pathogenic germs producing the disease but by the varying conditions of age, constitution, &c., presented by the patients. The serum treatment of pneumonia had no undesirable sequelæ, but at the same time it was of no specific action. Medicines were not able to shorten the duration of the illness, but some of the substances given with this object in view might have an injurious effect on the red corpuscles of the blood. Professor Koranyi has ascertained by recent researches that in pneumonia the amount of sodium chloride in the blood decreases and that its point of congelation becomes higher. By the influence of oxygen the blood is rendered normal again. He therefore recommended inhalations of oxygen and said that venesection was indicated in certain cases.

Professor PEL (Amsterdam) said that the prognosis of the disease depended not so much on the pathological alterations in the lungs as on the constitution of the patient. A robust patient often recovered from pneumonia in its severest form, whilst a person weakened by alcoholism, syphilis, or some other constitutional disease would die from a pneumonic process of limited extent. Professor Pel then reviewed all the drugs recommended for the treatment of pneumonia and concluded with the statement that they were all useless and of no specific action. The physician, however, can do very much for the patient by providing suitable nourishment and proper nursing and by relieving pain. It is a great mistake to allow patients to get up too soon; they should be kept in bed a week after the crisis. Rest in bed, which weakened healthy persons, was strengthening for convalescents. With regard to the use of alcohol he said that it might be administered in small doses as a tonic; large doses must be avoided. It must be the aim of the physician to guard against cardiac failure. This was the essential point in the treatment of pneumonia.

Dr. MÜLLER, of the Army Medical Corps, gave statistics of the disease in the German army. He said that the number of cases had decreased during the past 20 years, but that the mortality was still rather high. Every soldier convalescent from pneumonia had a furlough of four weeks.

Professor NOTHNAGEL (Vienna) and Professor SENATOR (Berlin) strongly recommended systematic hydropathic treatment of the disease.

Endocarditis.

Professor LITTEN (Berlin) said that Endocarditis was almost always a sequel of infectious diseases and with the exception of the atheromatous form was caused by micro-organisms. From a clinical point of view a benign and a malignant form were to be distinguished. With regard to its etiology there existed first a benign form of rheumatic, choreic, gonorrhœal, scarlatinal, diphtheritic, pneumonic, and traumatic endocarditis; in the second place a malignant, rheumatic, choreic, and gonorrhœal endocarditis; and finally a septico-pyæmic endocarditis caused by a combination of one of the two first species with pyogenic germs. The benign and the malignant form of gonorrhœal and rheumatic endocarditis were caused by the same species of micro-organisms of different virulence. Malignant endocarditis often produced metastases. These were simple infarcts if caused by emboli detached from the endocarditic deposits or from coagula in the right ventricle, but suppurative if the emboli contained streptococci. The septico-pyæmic form was only a symptom of general septic pyæmia. Traumatic endocarditis might either be benign and end in recovery or it might produce chronic disease of the heart, or if combined with pyogenic germs might turn into the septic form.

Dr. LENHARTZ (Hamburg) denied that the suppurative and the non-suppurative forms of malignant endocarditis

were in reality so definitely separated as was asserted by Professor Litten. In septic endocarditis plain and suppurative infarcts were often present together in the same patient. Moreover, the duration of the disease was not characteristic, in septic endocarditis especially, the puerperal form of which might last for several months.

Professor WASSERMANN (Berlin) said that different species of micro-organisms were able to produce endocarditis. It was not yet ascertained why the same germ produced at one time a benign and at another time a malignant endocarditis; these differences depended, not only on a difference in the virulence of the micrococci, but also on very subtle biological alterations described by Professor Ehrlich in his researches on hæmolysis. He was able once to detect a very virulent streptococcus in a case of rheumatic endocarditis.

Dr. MICHAELIS (Berlin) mentioned the bacteria detected by Professor von Leyden in some cases of rheumatic endocarditis. In acute rheumatic arthritis he had never found bacteria as described by Dr. Singer of Vienna. In tuberculous endocarditis Koch's bacilli were present in the endocarditic growth, but it was very difficult to detect isolated micro-organisms.

Professor von JÜRGENSEN (Tübingen) said that endocarditis was never limited to the valves as myocarditis was always present at the same time. Genuine rheumatic endocarditis had not been observed by him of recent years. The character of endocarditis had altered and it had become more chronic, showing an increase in the number of respirations, early interference with the cardiac action, and nervous symptoms. He recommended that the patients should be kept in bed until all the acute symptoms had disappeared.

Professor SCHOTT (Nauheim) agreed with Professor von Jürgensen and said that for anatomical reasons endocarditis once established could not be entirely got rid of.

Malta Fever.

Professor NEUSSER (Vienna) drew attention to Malta Fever, an infectious disease which occurred on the coast and on the islands of the Mediterranean. He showed a patient who had caught the disease in Burgas, a town on the Black Sea. The symptoms of Malta fever were very like those of typhoid fever. In doubtful cases bacteriological examination decided the diagnosis. Owing to the increase of traffic between inland Europe and the shores of the Mediterranean a knowledge of Malta fever was now more important than it was formerly.

Leukæmia.

Professor TÜRK (Vienna) criticised the opinion of Professor Löwit that leukæmia was caused by specific corpuscles in the blood. He asserted that these corpuscles were produced artificially by the staining of the leucocytes. He did not share the opinion that leukæmia might appear in rabbits after the injection of such corpuscles.

Professor LOWIT said that the corpuscles described by him were not identical with the typical hæmamœbæ and protozoa of malaria.

(To be continued.)

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Powers of Boards of Guardians.

If the Stockport Union may be taken as a sample boards of guardians are becoming increasingly restive under the restrictions of the Local Government Board. The first meeting for the current year was held on April 23rd, and the annual appointments were made. It was decided to ask the Poor-law Unions' Association to make representations in the proper quarter to the following effect: "That the powers of the Local Government Board be revised by Parliament with a view to extending to boards of guardians greater freedom in the carrying out of their duties under the Poor-law and other Acts, especially in order to secure (1) the entire control by guardians over the appointments, salary, tenure of office, and duties of their officers; (2) an extension of the time at present allowed by the Local Government Board for the repayment of Poor-law loans; (3) that orders and regulations issued by the Local Government Board affecting boards of guardians shall before coming into operation be submitted to boards of guardians for their consideration and shall also be confirmed by Parliament." The proposer of this resolution thought no popularly elected body in the country was so tied down and bound as were boards of guardians, and "it was a disgrace that the affairs of a large union should be dealt with and vetoed by one clerk seated in a room in London answering in the name of the whole Local Government Board." If these additions to the powers of boards of guardians are given it will render the position and tenure of office of Poor-law medical officers more insecure than it is at present and more subject to local influences. Much as boards of guardians may feel the curb of the Local Government Board it is as nothing compared with the disadvantage to the poor and to the medical officer himself that would follow from his being subject to the caprice of irresponsible boards of guardians.

Bury Vaccination Fees.

At the first meeting of the newly-constituted Bury Board of Guardians, held on April 25th, the much-discussed question of vaccination fees came up again. Though the Local Government Board declined to sanction the proposal of the guardians some little time ago to reduce the fees to the minimum allowed by the Board the guardians have adopted a lower scale than that hitherto used. The fees payable to public vaccinators are now to be "5*s.* for vaccination and 2*s.* per visit, against previous payments of 7*s.* and 2*s.* 4*d.*, with a fee of 2*s.* 6*d.* for revaccination." The fee payable to vaccination officers is to be 1*s.* 4*d.*, a reduction of 4*d.* It is stated that the officials are willing to accept this scale of fees.

Mr. Walter Whitehead on the Advantages of Hospital Treatment.

A bazaar was held the other week in aid of the endowment fund of the Aitken Memorial and Jubilee Cottage Hospital at Ramsbottom. It was opened on the first day by Lord James of Hereford and on the day following by Mr. Walter Whitehead. The latter took the opportunity of showing the advantages of hospitals to such a community as that of Ramsbottom which is a manufacturing town where the people are chiefly employed in the mills. He said that years ago it mattered little where patients were treated, but now surgical treatment involved so many details—comparatively trifling, perhaps, taken singly—upon the observance of which the success of the case depended that it was very important to have recourse to a hospital. He thought that a patient had a 25 per cent. better chance of recovery in a hospital than in a palace, especially if it were a surgical case, and the new hospital with its nine beds would prove a great boon to Ramsbottom. Patients would not have to take the long journey to Manchester and it might lighten a little the pressure on the Manchester Royal Infirmary. "How great that pressure was they would understand when he said that there were sometimes as many as 40 patients waiting for a bed to be vacant, and he was afraid that in many cases they had to wait till they were past medical or surgical treatment." This is an argument in favour of an early decision as to what is to be done with the Manchester Royal Infirmary.

Infant Mortality in the Northwich District.

It is discouraging that, notwithstanding the energy and activity as to sanitary matters now displayed by authorities in town and country, the mortality among infants in far too many places would seem to indicate that a considerable proportion of our highly civilised Christian people are living in a state of barbarism. In the annual report of the medical officer of health of the Northwich Urban District, recently issued, it is stated that the deaths under the age of one year constitute—as is so often the case—the most serious item in the mortality tables, 30 per cent. of the total mortality coming under this head. It is discreditable that 214 per 1000—more than one-fifth of those born—should die before the year is out, especially when so many of the deaths are from preventable disease. Many factors are at work—ignorance, apathy, neglect, and in far too many cases no great wish that the child should live. How much is the compulsory education in our board or voluntary schools doing to build up character and to give the knowledge that will help the mothers of the coming generation to save their children from untimely death?

Scarlet Fever in the Police-court.

A case that occurred recently at Sale, Manchester, shows the almost incredible stupidity which some people exhibit with

regard to infectious disease. A woman was summoned for letting her boy attend school and run in the street while affected with scarlet fever, and either ignorantly or impudently took the child—still infectious—with her to the police-court when she answered the summons. She was fined 40*s.*, the bench making the very wise, if obvious, remark that "the case was serious."

May 1st.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

Edinburgh University General Council.

THE reports in connexion with the approaching meeting of the General Council of the University of Edinburgh have just been issued. The business committee record with deep regret the death of Sir William Priestley, the representative of the Universities of Edinburgh and St. Andrews in Parliament. The finance committee point out the necessity for augmentation of the general university fund. This fund stands as follows:—Total revenue in 1898-9, £45,789 16*s.* 9*d.*, in 1897-8, £43,501 6*s.* 8*d.*; expenditure in 1898-9, £45,320 5*s.* 4*d.*, in 1897-8, £43,904 4*s.* 3*d.*; excess of expenditure over revenue (1897-8), £402 17*s.* 7*d.*; surplus revenue (1898-9), £469 11*s.* 5*d.* The upkeep of the M'Ewan Hall is not met by the considerable revenue which comes in as rent for concerts, and the general university fund has to bear the loss. The expenditure upon the principal's official residence, which he does not occupy, has also been heavy. The deficit might in future become serious.

Dispute between Hospital Committee and Medical Men.

At the last meeting of the Joint Committee of the new Infectious Diseases Hospital, Elgin, the clerk submitted a minute of meeting of the medical practitioners of the town of Elgin (transmitted by Dr. Watson, medical officer to the hospital), who had unanimously resolved that "if the salary [i.e., of the medical officer] is to be a fixed one £50 is the minimum which should be offered and accepted. If the salary is not to be absolutely fixed they would be prepared to accept either of these alternatives—£40 a year on the understanding that if at the end of the year this was found to be inadequate remuneration for services rendered an additional sum should be allowed; or if it should be preferred to pay per visit the rate should be not less than 5*s.* per visit." It was argued that "it was the duty of the committee to break down this combination of doctors," and it was ultimately agreed to refer the matter to the town council and county council. It was also resolved to open the hospital on May 15th if duly certified by the medical and sanitary officers and that persons who in the meantime sent patients to the hospital would have to provide for medical attendance.

The Queen and the Red Cross Hospital Movement.

Funds are being raised in the city of Aberdeen and in various parts of Aberdeenshire and adjoining counties for the equipment of beds in the Scottish National Red Cross Hospital at Cape Town. The Queen's Balmoral estate is in Crathie parish and in connexion with the bed proposed to be called the "Crathie Bed" the Queen has contributed £10 and Princess Henry of Battenberg has contributed £3.

City Hospital, Aberdeen.

The salary of Dr. J. S. Laing, resident medical officer, is to be increased by £25 per annum, making it £100, with furnished rooms, board, and washing.

Aberdeen University.

The summer classes in the medical department opened on April 14th and 25th.—Mr. W. R. C. Middleton, M.B. Aberd., medical officer of health, Singapore, has presented to the Anthropological Museum of the University an extensive and valuable collection of specimens illustrating the habits and customs of the natives of the Malay Archipelago, as well as a large number of objects illustrative of the anthropology of the West Indies, New South Wales, Queensland, Victoria, Fiji, and New Hebrides, collected by the late very Rev. James Ross, M.A. Aberd., Ph.D., New South Wales.

The Forthcoming Public Health Congress in Aberdeen.

In connexion with the annual meeting of the Royal Institute of Public Health, to be held in Aberdeen in August next, Professor D. J. Hamilton, Aberdeen University, has been appointed president of the bacteriological section, and Dr. Farquharson, M.P., secretary of the Municipal Hygiene Section. Other appointments have also been made. About 3000 invitations have been issued and a successful congress is expected. Professor M. Hay, M.D. Edin., medical officer of health, and Mr. K. Cameron, sanitary inspector, Aberdeen, are acting as local secretaries.

May 1st.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Royal Visit to Dublin from its Medical Aspect.

ALTHOUGH addresses were received by Her Majesty from the Royal College of Physicians of Ireland and the Royal College of Surgeons in Ireland the personal visits of the Royal party to medical institutions were strictly confined to those connected with public charity. It was hoped that Royalty would distinguish the Royal College of Surgeons in Ireland by a visit, for there are few public bodies in Ireland which have been more intimately associated with Royal receptions in the past than that College. Ever since George IV. came to Dublin in 1821 the institution has been conspicuous in its homage to the Throne. The best portrait in Ireland of the Queen is to be seen there, while the examination hall, known as the Albert Hall, contains a most life-like bust of the late Prince Consort. During the recent brief visit of Her Majesty time probably did not permit of any such honours outside those conferred on medical charitable institutions. It seems, indeed, surprising that Royalty should have during the brief period found time to honour so many medical institutions. The Queen herself graciously distinguished three of the Dublin clinical hospitals by a visit in person: the Adelaide Hospital on April 17th, the Meath Hospital in the following week, and finally the Mater Misericordiæ Hospital on April 24th. The first of these institutions honoured by her presence was the Adelaide Hospital. She was received by representatives of the governors by the medical staff, including the senior physician (Dr. James Little) and the senior surgeon (Mr. Henston), and by the lady superintendent and the large staff of nurses connected with the institution. She was similarly welcomed at the Meath Hospital, where she was received by the governors and by the medical staff, including Sir Philip Smyly, the senior surgeon. Her visit to the Mater Misericordiæ Hospital was made on one of the latter days of her sojourn in Ireland, and was, in point of time, the last of the public bodies visited by Her Majesty. Her coming there was heralded by the morning papers and her visit was accordingly witnessed by some thousands of the citizens who were anxious to obtain a glimpse of their Queen. She was received by the lady superior of the sisters of mercy and by the medical staff, and was especially gracious on this occasion. She made a complimentary allusion to the large and handsome front of the hospital and inquired as to its capacity. She was informed by the senior physician, Sir Christopher Nixon, that the building harboured 500 inmates, including 440 patients under treatment, and that it was supported entirely by voluntary contributions from the public. The terrace on the western side of the hospital entrance was occupied by the sisters of mercy, while that on the eastern aspect was filled by Miss M'Givney, the lady superintendent of nurses, and her large staff of lay nurses. Many visits were made to the hospitals by Princess Christian, Princess Henry of Battenberg, and her Excellency Lady Cadogan during the period of the Queen's visit to Dublin. Perhaps the most notable of these was the visit which distinguished the City of Dublin Hospital. Her Royal Highness Princess Christian, accompanied by her Excellency the Countess Cadogan and a brilliant suite, visited the City of Dublin Hospital on April 21st. On that occasion the Princess Christian laid the foundation-stone of the new Nursing Home in connexion with the hospital, and stated that her Royal mother had commanded that the title "Royal" should henceforth be prefixed to the name of the City of Dublin Hospital. Many other visits were made by Royalty to medical charitable institutions. The Princess Henry of Battenberg visited the Hospital for Children in Temple-street and was received by the sisters of charity who manage that institution. The Princess Christian paid a visit to St. Vincent's Hospital, Stephen's green, and was received

there by the sisters of charity and by the medical staff of the hospital. The Mater Misericordiæ Hospital is proud of the special honour conferred on it—doubtless on account of its being the largest of the charitable hospitals in Ireland. It alone, among charitable institutions and hospitals, was twice honoured by visits from Royalty during Her Majesty's visit—on the first occasion by a visit from the Princess Christian accompanied by Her Excellency the Countess Cadogan, with a brilliant following, and, secondly, on April 24th, by the presence of Her Majesty the Queen.

The New Coroner for the City of Dublin.

Mr. Louis A. Byrne, F.R.C.S. Irel., has recently been elected coroner for the city of Dublin in succession to the late Mr. Joseph E. Kenny.

Downpatrick Asylum.

Dr. Martin has been appointed assistant resident medical officer in place of Dr. G. W. O'F. Clark (resigned). The salary of Mr. M. J. Nolan, the resident medical superintendent, has been increased by £100 per annum.

The Mater Infirmorum Hospital, Belfast.

This new Belfast Hospital was formally opened on April 23rd, when, at the invitation of those connected with it, there was an immense assemblage of people of all denominations. His Eminence Cardinal Logue, who presided, called upon the Lord Mayor of Belfast who in a few suitable words declared the hospital open and on behalf of himself and his fellow citizens wished it every possible success. The Marquis of Dufferin and Ava, K.P., invoked the blessing of the Almighty to rest upon the institution, upon the Sisters of Mercy who administered its affairs, and upon the patients who would find refuge and relief within its walls. At the conclusion Dr. Henry, the Roman Catholic Bishop of Down, announced amidst great enthusiasm that the undertaking of that building (which cost, it is said, close on £50,000) had been launched free of debt. It is also stated that there is a nucleus of an endownment fund. At a charity sermon preached by Cardinal Logue in one of the Belfast chapels on the previous day a sum of £1900 was collected. This hospital, which will be a great addition to the charities of Belfast, has a frontage of 230 feet to the Crumlin-road and is situated in an area of slightly over one acre. The hospital stands on a foundation of red boulder-clay with a gentle incline from north to south. It is designed on the "pavilion" system. The principal portions of the hospital may be said to consist of three distinct blocks facing the Crumlin-road, the centre one being the administration building, flanked by a pavilion block on each side, that on the east being for males and that on the west for females. Each pavilion is three storeys in height and contains two large wards on each floor, each of these wards being provided with two sanitary chambers in towers. In connexion with each of the large wards there is a ward kitchen store and a small ward with one bed. Between the extreme pavilions and the administration block is placed a smaller pavilion, which contains smaller wards and day-rooms for convalescents, and also the children's wards. The hospital is planned for 150 beds besides the cots for children. The extern department is placed in the west pavilion, with waiting-room for patients and consulting-rooms for the members of the medical staff. Every sanitary convenience is provided. There is a home for nurses and in the administration block there are rooms for the intern medical officers. In the first floor of the administration block there are special wards for paying patients, while the top floor is reserved for the use of the nuns who labour in the hospital. There is a chapel for the use of inmates and patients behind the administration block. There are observation and "recovery" wards for the patients' immediate use after operations, operation-rooms, and lecture theatre. There are admirable kitchen arrangements and dining-rooms for the officials and working staff, a laundry, boiler- and engine-houses, and a mortuary and post-mortem room. The hospital is built of red brickwork with stone dressings, it is heated by hot water and lighted by electricity. The front range of the buildings are recessed 28 feet from the Crumlin-road, and this space is planted as a garden and railed off. The principal entrance is in the centre of the administration block. The floors of the wards and corridors are of concrete covered with "tenazzo." The windows are of the new "N.A.P." pattern—that is, they can be moved up and down, while they also revolve on pivots and so can be easily cleaned. The roofs of the hospital are covered with the patent vulcanite flat roofing and are laid out as gardens with grass-plots, flower-beds, &c. There is a special entrance large enough to admit the ambulance wagon with accident cases, and in this way the patient can be brought direct to the hoist and be carried, still on the ambulance stretcher, to the floor where he is to be attended to or treated. Mr. William J. Fennell, M.R.I.A.I., is the architect and he has succeeded in planning a hospital of a most efficient kind with every modern convenience which will be a great addition to the medical institutions of Belfast.

Newry Union.

Dr. T. O'Riordan, Ballymote, Sligo, has been elected dispensary medical officer of the Meigh district of the Newry Union.

Appointment of Professor of Materia Medica at the Queen's College, Cork.

Dr. John Dundon has been appointed to the chair of Materia Medica at the Queen's College, Cork. Dr. Dundon had a very distinguished career when a student of the Cork Queen's College and in the year 1894 graduated with honours at the Royal University; four years later he obtained the Fellowship of the Royal College of Surgeons in Ireland.

May 1st.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Hygiene of the Paris Metropolitan Railway.

THE Paris Metropolitan railway which should have been ready for the opening of the Exhibition is not, as is the case with so many of the things promised for this date, yet completed. Hygienic difficulties are the cause of its not being opened for traffic. Very likely, however, this is not the only cause, for the underground railway, which has been in consideration for some ten years, was only definitely started last year and the hurry with which the work has been carried on has been the cause of several miscalculations. Unforeseen springs of water, for instance, have thrown many difficulties in the way of the works. A bridge to be placed over the St. Martin canal has not been delivered by the Creusot works owing to strikes, and finally, the carriages have been declared to be unsatisfactory. Apparently the line cannot be open to the public before an interval of three months, although the tunnel is completed, the stations and stairways to them are finished, and the rails are laid. The meeting of the Municipal Council showed that the hygienic conditions of the line were very defective and many alterations would have to be made before it could be opened for traffic. M. Parisse, at the meeting held on April 14th, drew the attention of the Council to the very deficient ventilation of the tunnel. The engineers responsible for the works relied upon the stairways leading to the stations for this purpose. These are very numerous for there is a station about every 200 metres and they are on very variable levels. Besides, there is a considerable difference of temperature between the air of the outside and that of the inside. M. Parisse, however, considers that the means of aeration are altogether insufficient for a tunnel containing a number of persons bringing in mud and sputa on their shoes together with other impurities. I myself when visiting the tunnel just after its completion was struck by the strong urinous odour which prevailed, caused by the workmen having to use the soil of the tunnel itself as a urinal. Another source of ventilation which was counted upon was the displacement of the air by the movement of the trains, which are driven by electricity and which, despite the numerous stops, go at a pace sufficient to traverse the greatest length of Paris in 20 minutes. M. Parisse, however, declares that movement of the air is not necessarily the same thing as renewal and that arrangements must be made for a continual fresh supply. The Council proposes to erect a series of electric fans which will supply fresh air previously filtered and the stairways will serve as upcast shafts for the escape of the foul air. To consider the question the Council has appointed a commission, consisting of 15 members, representing the Municipal Council, the Academy of Sciences, the Academy of Medicine, the Prefecture of the Seine and the Prefecture of Police. This commission will

inquire into the matter and study the various means whereby the safety of both travellers and their property can be best secured.

Immunity against Symptomatic Charbon by the Administration of Preventive Serum.

In some former researches into this question M. Arloing studied the preventive action of the serum of an ox strongly immunised against symptomatic charbon, and decided that this serum is capable of neutralising in vitro an amount of virus equivalent to five times a mortal dose. On April 9th he laid before the Academy of Sciences the results of some new researches. He stated that this condition of passive immunity is only ephemeral and disappears completely at the end of about eight days. But a much more lasting immunity can be produced by injecting some days after the administration of the serum a lethal dose of virus. This immunity lasts from 12 to 15 days. At the end of this time local manifestations appear, but such are never fatal. M. Arloing tried to obtain the same result by injecting the serum and the virus at the same time. Death, however, was only retarded. A control animal died in from 30 to 40 hours, while the others lived for four or five days.

A Hospital Debate.

At the Society of Surgery a full-dress debate has taken place as to the necessity for every hospital surgeon being provided with separate wards for suppurating and septic cases. A keen discussion which lasted for over an hour took place upon this occasion between Messieurs Quenu, Bazy, Tuffier, Nélaton, Routier, and others. M. Quenu, who is all for the most rigorous asepsis, considered that a patient should have four or five baths before being operated upon and those in a bath specially allotted for such cases instead of as at present being sent to the baths common to the whole hospital, which only serve to store (*emmagasiner*) microbes from all the medical and surgical wards in the hospital. M. Quenu considers that a surgeon should use gloves for any septic operation and should never make a post-mortem examination or even go into any laboratory of pathological anatomy. M. Rochard pointed out that for all that M. Quenu was in charge of the anatomical department of the central school of the hospitals, and M. Bazy had no hesitation in allowing that he had performed two laparotomies which could not wait just after having opened a gangrenous carbuncle. Notwithstanding this, however, the two cases did very well indeed, and this he attributed to the fact that he was quite awake to the necessity for making his hands aseptic. M. Bazy, with whom M. Routier agreed, considered that it was necessary to avoid exaggeration on this point. If this were not done the surgeon might as well give up operating in any case of urgency. Absolute asepsis, however desirable in theory, was impossible in practice; the essential point was that they should try to arrive at the ideal as nearly as possible. Results showed that the most careful cleansing of the hands gave success provided that the operator bore in mind that no negligences were committed during the operation itself.

Death of Dr. Apostoli.

The death is announced in Paris of Dr. Apostoli, aged 53 years, well known for his writings upon electro-therapy. He left a number of works upon the treatment of fibroma by electricity and in his later years was immersed in the study of sinusoidal currents. Though attached to no hospital and never holding any official position he was editor of the leading French journal of electro-therapeutics and his private clinic was thronged by patients, students, and foreign medical men.

May 1st.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The International Congress against Tuberculosis.

FEW, indeed, were the English-speaking representatives at the Congress just closed, and the fact is regrettable, as all the other great Powers and several of the smaller ones contributed their delegates, many of whom are in the first rank in medicine, scientific and clinical. The Congress itself, moreover, was perhaps the most successful ever held in Italy and served to abate the impression left by too many of its predecessors that brilliant oratory is more conspicuous on such occasions than practical induction resulting from accurate observation and cautious thinking. Italy, indeed, spared no pains to start her crusade against tuberculosis with success. The leaders of all her medical schools coöperated with those of their Neapolitan sister towards that consummation, while her Minister of Public Instruction not only strained his official resources in behalf of the Congress but gave its proceedings the benefit of his genial presence and his large clinical experience. And she had her reward. Foreign delegates of the stamp of Rudolf Virchow, Karl Posner, and Benno Baginsky of Berlin and Lannelongue of Paris (to mention only a few) bore cordial testimony to the prophylactic and therapeutic value of such papers as those of Sanarelli of Bologna, Ceccherelli of Parma, Ruata of Perugia, Maramaldi and Gioffredi of Naples, and other representatives of Italian schools; and the discussions that followed—discussions in which the presidents of the sections such as De Giovanni of Padua and De Renzis of Naples encouraged the general practitioners among the members to join—evoked a professional knowledge and ratiocinative power of the happiest augury for their country's medical future. The evidence adduced, moreover, as to the interest taken by the public in the "anti-tuberculous crusade" abounded in gratifying details, prominent among which were the large donations bequeathed by private testators, not only to the clinical schools in general, but to the special sanatoria for tuberculous patients arising in all the centres of population from the Alps to Etna. And not only will the Italians themselves profit by this spread of knowledge and prophylactic effort against tuberculosis, but the world of travel that throngs their winter cities and maritime resorts will, ere long, have one of its chief deterrents minimised, if not removed. The paper of Dr. Giuseppe Sanarelli of Bologna (whose work at Montevideo in investigating the bacillus of yellow fever is known to both hemispheres) gave highly re-assuring evidence in this direction—a paper on the "Profilassi della Tuberculosi sulle Strade Ferrate," which drew from the Commendatore Santoliquido (Director of Public Hygiene in the Ministry of the Interior) confirmatory testimony, still further reinforced by Professor Da Giovanni, president of the "Sezione Profilattica" of the Congress. Dr. Sanarelli concluded by pressing on the Government the adoption of a series of precautions, ten in number, by which the risks to the traveller on Italian lines will be reduced well-nigh to *nil* and the danger of contracting tuberculous disease or aggravating it when present *pro tanto* obviated. Concurrently with the Congress against tuberculosis another, though not on an international scale, ran its course—and that a successful one—on Laryngology, at which the bearings of that special department of medicine on tuberculous disease were happily accentuated. The official "Atti," or transactions of both congresses, will be published in the course of the summer, and by their renewed discussion must tend still further to put the prophylaxis and treatment of tuberculosis on a sound and satisfactory basis. As to the Exposition of Hygiene, which was to have been an attractive feature of the congresses, its opening has had to be postponed till May 9th—an unfortunate necessity, as the summer heat will deter the Northern visitor from availing himself of its many unique opportunities of observation and instruction. It will not be closed, however, till the middle of October next.

April 30th.

NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

The First Ten Years' Work of the New York Pasteur Institute.

THE New York Pasteur Institute was founded in December, 1889, and formally opened in February, 1890. Provided with the necessary material given him by M. Pasteur and encouraged by the sanction and wishes of his eminent teacher, Dr. Paul Gibier inaugurated the preventive treatment against hydrophobia in the New World. Although at that time more than 7000 persons had received the treatment in the Paris Institute there were many opponents of the method in different countries. Opposition was at first met

with in New York but feeling confident that in the end the results following the Pasteur treatment would convince its most obstinate antagonists Dr. Gibier pursued his experiments. He treated his first patient on Feb. 20th, 1890. For many years the work was carried on in the city of New York, but in 1898 it was removed to the country, where the Institute owned an experimental station and a farm. An office is kept in New York where all patients are received before being sent to the Pasteur Sanatorium. This plan of treating the patients in the country has proved exceedingly satisfactory. Patients who are being treated preventively against hydrophobia must lead during the treatment and for a time afterwards a very quiet life and observe as closely as possible the prescribed rules of hygiene; and by the present arrangement they are under the almost constant supervision of the resident physician. In all kinds of weather they can enjoy the pure mountain air without being confined to their rooms, and their diet is, of course, carefully selected and regulated. The more important results of the 10 years' treatment may be summarised as follows. Of the 1367 persons treated, 154 (11 per cent) were bitten on the face or head, 746 on the hands, and 467 on other parts of the body. In 447 (32·6 per cent.) cases the animal inflicting the wound was proved to be rabid by inoculation of rabbits or guinea-pigs or by the death by hydrophobia of other persons or animals which it had bitten. In 268 cases (19·6 per cent.) the animal was declared rabid by clinical or veterinary examination. In the remaining 652 cases the animal had disappeared or had been shot after having acted in such a manner as to lead one to suspect rabies. The yearly statistics have shown a mortality of, respectively, 0 deaths in 169 cases (0 per cent.) in 1890; two deaths in 100 cases (2 per cent.) in 1891; 0 deaths in 105 cases (0 per cent.) in 1892; 0 deaths in 85 cases in 1893; one death in 89 cases in 1894; two deaths in 167 cases (1·19 per cent.) in 1895; 0 deaths in 236 cases (0 per cent.) in 1896; one death in 133 cases (0·74 per cent.) in 1897; one death in 125 cases (0·80 per cent.) in 1898. Of these 1367 persons treated 456 were children under 10 years of age, 683 were men, and 228 were women. In 1287 cases the wounds were inflicted by dogs, in 70 cases by cats, in five by men, in two by cows, in two by horses, and once by a skunk. 1100 persons came to receive the treatment during the first week after being bitten; 140 the second week; 50 the third week; 39 the fourth week; nine the fifth week; five the sixth week; four the seventh week; five the eighth week; five the eleventh week; six the twelfth week; and four the fifteenth week. Out of the 19 patients who died in the 10 years three died before the completion of the treatment and seven within 15 days after the treatment had been completed. These 10 patients, who, according to the rule established by Pasteur, are not included in the statistics, leave a mortality of nine among 1357 patients, or 0·66 per cent. These figures compared with those of other institutions show that the results obtained from the Pasteur treatment are very nearly uniform. At the Pasteur Institute at Lyons 372 cases were treated from Nov. 1st, 1897, to Nov. 1st, 1899; 26 persons had been bitten on the face (6 per cent.), 203 on the hands, 143 on other parts of the body. In 58 cases (15·5 per cent.) the animal had been proved to be rabid, in 207 cases (55·6 per cent.) it was very probably rabid, in 107 cases rabies was suspected. At the Institute of Marseilles 1460 persons have been treated since its opening five years ago. Six deaths have occurred (0·40 per cent.). In 307 cases (21 per cent) the animal inflicting the bite had been proved to be rabid; it was very probably so in 789 cases (54 per cent.). At the Athens Institute 797 persons were treated from August, 1894, to the end of 1897 and two deaths are recorded (0·25 per cent.).

The Health of Manilla.

Army reports show that the census of Manilla just completed by the Health Department gives the city an unpleasantly high rank among the unhealthy cities of the world. At a conservative estimate it establishes a death-rate of over 40 per cent. Former estimates and censuses have given Manilla a population of 300,000. The new census, which was a careful count of the natives and Chinese living in buildings and boats in the police districts of Manilla, gives a population of 190,714, of whom 30,000 are Chinamen. There are to be added about 50,000 more inhabitants, including those of several villages within city limits, the Americans and Europeans, and 1400 priests in monasteries. The deaths in Manilla officially reported during the six months from July 1st to Dec. 31st last year were 6302; of these 2941 were children. Some of the causes were: beri-beri, 507; tuberculosis, 385; bronchitis, 314; dysentery, 229; fevers, 287; while stomach troubles ranked high. Manilla has now three diseases epidemic, bubonic plague, beri-beri, and smallpox. The latter diseases, together with leprosy, are always present in the Philippines and the people look upon them as a matter of course, only avoiding direct contact with the sufferers. Two months ago the first case of bubonic plague was discovered in Manilla; since then there have been 200 cases, according to the estimates of the health authorities, and at least 80 per cent. of them have proved fatal. Yet there has been no panic, no families have fled from the city, and the usual routine of life has been preserved. The repressive measures of the health officers have been comparatively simple but have proved remarkably effective considering the conditions they have had to fight. Their aim has been to make and keep the city clean, which is the last thing that the Philippinos and Chinese propose to do unless they are driven to it.

National Health Legislation.

A renewed effort is being made to have a Bill providing for a national board of health passed in the present session of Congress. Demands for its enactment have been made by many public and commercial bodies and men eminent in special fields of science. The Bill is intended to prevent the spread of contagious diseases between the States. There is at present an organisation known as the Marine Hospital Service which is under the control of the Treasury Department. It has been active for many years in maintaining coast quarantine and in 1893 its powers were extended to the operations of quarantine between the States and, in emergencies, within the States, but it is contended that this service is not sufficient. The new Bill will provide for an advisory board or commission, to consist of one representative from each State and territorial board of health, in addition to a representative appointed from the medical corps of the army and of the navy and from the United States Department of Justice. This advisory board will be under the supervision of a commissioner of public health. It is contended that such a commission would be instrumental in bringing about a thorough coöperation between the general Government and all the States and territories, to the great improvement of the conditions of the public health. A special committee of the New York Board of Trade, in a report on this subject, states that they have been very much impressed with the great importance of the question of preserving the public health and with the need of legislation which will create in the United States a national system of coast and inter-State disinfection. They use the word "disinfection" as distinguished from quarantine because they are led to believe that with the adoption of a proper and general system of sanitation and disinfection throughout the country, guided and controlled by one general head in thorough harmony and sympathy with every local and State board, every such board could be brought into touch and coöperation with every other local and State board, and what has heretofore been known as quarantine would practically disappear as being unnecessary, barbarous, and obsolete. With the disuse of quarantine would cease the serious and unnecessary interruptions of commerce and travel in times of epidemic and with the perfecting of such a system as they outline the recurrence of epidemics would become less and less frequent.

Insanity among the United States Troops.

The public mind has been much agitated by reports of the large number of insane soldiers in the army serving in the Philippines. In reply to a Senate resolution the Secretary of War has prepared a statement in regard to insanity and suicide among the troops in the Philippines. From this it appears that there has been a smaller rate of insanity among the troops in the East than there has been in the regular army for 10 years. From July 31st, 1898, to March 20th, 1900, 35 cases were reported from the Philippine Islands. The mean strength of the force during that period was 35,000 men, which would be a rate of 31·3 cases in a full twelvemonth. The mean strength of the army for the 10 years ending July, 1898, was 29,000 men with a mean annual rate of insane of 31·1. In regard to suicides it appears that since the close of the war the annual rate has been 0·64 per 1000 men, while in the regular army for 10 years the suicides were at the rate of 0·63 per thousand annually. The current newspaper reports alleged that the insane brought

from the Philippines were in a demented and hopeless condition, but the fact is that of 37 of the insane soldiers sent to the Government asylum 11 have recovered, showing that their state was by no means so bad as had been represented.

April 17th.

Obituary.

ROBERT GLASGOW PATTESON, B.A., M.B. (T.C.D.), F.R.C.S. IREL.

As already mentioned by our Dublin correspondent,[1] the death of Dr. R. G. Patteson of Dublin took place from pneumonia, secondary to Bright's disease, at his mother's residence, Dundalk, on April 11th, at the early age of 38 years. Born in Dundalk in 1862, he studied at the grammar school there, and entered Trinity College, Dublin, in 1879, obtaining a junior exhibition, which in two years was followed by a senior exhibition. He graduated M.B. in 1885, in the same year winning the Haughton medal in clinical medicine at Sir Patrick Dun's Hospital. In 1886 he was surgical travelling prizeman in Trinity College, and in connexion with this pursued his studies at London, Berlin (under Koch), and at Vienna. Returning to Dublin he acted as assistant surgeon in the dispensary of St. Vincent's Hospital, until in 1895 he was elected as surgeon to the Meath Hospital in succession to Sir George Porter. In 1890, when only 28 years of age, he became a Fellow of the Royal College of Surgeons in Ireland and shortly afterwards was appointed examiner in physiology, pathology, and histology. He was a Fellow and Member of the Surgical Council of the Royal Academy of Medicine of Ireland. Dr. Patteson was an excellent writer and had made several important communications, especially on skin ailments. He was the author of "A Synopsis of Diseases of the Skin and Hair," "Trichomycosis Nodosa, a Bacillary Disease of the Hair," "Treatment of Chronic Eczema," "Contribution to Pathology of Joint Bodies," "Adenoma of the Breast in Childhood," &c. Shortly before his death he was engaged to write articles in the new "Encyclopædia Medica," and in the first volume of that work two have already appeared on "The Axilla" and "Boils and Carbuncle." Dr. Patteson was a thoroughly educated medical man of a very scientific turn of mind, and, from the work he had already done, the greatest hopes were entertained of a brilliant professional career which has unfortunately been cut short by his early death. He was interred on April 14th from his mother's residence at Dundalk, the attendance at the funeral being one of the largest ever seen in co. Louth, the little rural burying place of Kane receiving the remains of one whose premature demise is a distinct loss to medical science in Ireland.

[1] THE LANCET, April 21st, p. 1171.

DANIEL AINLEY, L.R.C.P. EDIN., M.R.C.S. ENG.

THE death of Mr. Daniel Ainley of Halifax leaves a considerable void in the ranks of the profession in that town. A native of Halifax, where he was born 65 years ago, Mr. Ainley on reaching man's estate was for a time engaged in business pursuits which he relinquished in order to devote himself to medical study at St. Bartholomew's Hospital. In 1868 he became qualified as M.R.C.S. Eng., and commenced practice in Halifax; in 1874 he took the diploma of L.R.C.P. Edin. His professional abilities and the confidence which his fellow-townsmen reposed in him led to his being appointed medical officer of health for the borough in 1872. He continued to carry on private practice for a considerable time after entering on the duties of this appointment, but some years ago various changes were made in the health department of the corporation, and from that time to the end of his life Mr. Ainley confined himself to the work of the medical officer of health. One of the principal events in the medical history of Halifax was the small-pox epidemic of 1892 and 1893, when Mr. Ainley's department had to provide for over 500 patients who were removed to hospital. The deceased was a prominent member of the Halifax Temperance Society and an office-bearer in Salem Chapel. He died on April 24th at Bournemouth, where he was on a visit to his son-in-law.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.—The deaths of the following eminent foreign medical men are announced:—Dr. J. A. Murphy, formerly Professor of Medicine in the Miami Medical College, Cincinnati.—Dr. A. Murillo, Dean of the Medical Faculty of Santiago, Chili.—Dr. P. Cavallo, one of the original editors of the well-known Italian medical journal *Il Morgagni*.—Dr. Saxtorph, Professor of Surgery in Copenhagen, aged 78 years.—Dr. Albert B. Strong, formerly Lecturer on Anatomy in the Rush Medical College, Chicago.—Dr. Pasquale Sgrosso, teacher of Ophthalmology in the University of Naples.—Dr. Josef Gruber, Professor of Otology in Vienna, and author of a large number of papers and works on diseases of the ear, at the age of 73 years.—Dr. Hofmokl, Extraordinary Professor of Surgery in Vienna, at the age of 60 years. He was formerly assistant to Professor Dumreicher.—Dr. Thomas B. Hood, Professor of Diseases of the Nervous System in the Howard University, Washington.

Medical News.

UNIVERSITY OF CAMBRIDGE.—At the third examination for medical and surgical degrees, Easter term, the following candidates were successful:—

Part I. Surgery and Midwifery.—G. F. Barham, B.A., and A. E. Bodington, M.A., Caius; A. R. M. Brenan, B.A., Trinity; J. M. Brydone, Jesus; F. J. Child, B.A., Christ's; H. N. Clarke, B.A., and J. S. Clarke, B.A., Caius; J. G. Cooke, B.A., Sidney Sussex; K. E. Crompton, B.A., Caius; G. W. Deeping, B.A., Trinity; J. B. Dunlop, B.A., Sidney Sussex; W. E. M. Ede, B.A., King's; A. Emerson, B.A., Caius; R. L. V. Foster, B.A., King's; T. B. Gilbart-Smith, B.A., Trinity; W. H. C. Greene, B.A., Corpus Christi; E. B. Leech, B.A., Christ's; N. Maclaren, B.A., Trinity; A. S. Mellor, B.A., King's; C. H. Miller, B.A., J. C. Newman, B.A., and G. H. Orton, B.A., Trinity; T. W. Paterson, B.A., Caius; J. S. S. Perkins, B.A., St. John's; J. C. S. Rashleigh, M.A., and L. Reynolds, B.A., Trinity; H. H. Riddle, B.A., Peterhouse; J. C. A. Rigby, B.A., Caius; R. W. S. Rowland, B.A., H. Selwyn; L. B. Scott, B.A., Christ's; G. A. C. Shipman, B.A., Trinity; J. L. Timmins, B.A., Emmanuel; R. H. Urwick, B.A., Trinity; H. Walker, B.A., King's; T. H. E. Watts-Silvester, B.A., and R. F. Williams, B.A., Caius; W. W. Wingate-Saul, M.A. Trinity; and H. C. S. Woodward, M.A., Downing.

At the examination in sanitary science for the diploma in public health the following candidates satisfied the examiners in both parts of the examination:—

Herbert Taylor Bury, Joseph Sebastian de Silva, James Morison Gardiner, Leonard Gilbert, Sampson George Victor Harris, William McCallim, Brendan MacCarthy, William McGilchrist Montgomery, Arcot Kodandapani Mudali, Donald Munro, Hugh Basil Greaves Newham, John Vernon Rees Roberts, Rustom Furdoonji Seervai, Sholto Douglas Thomson, George Lewis Travis, Malcolm Watson, Mary Frances Williams, Bertram Michell Young, and Henry William Pennyfather Young.

It is proposed to appoint Dr. Nuttall, who has for some time been assisting Professor Woodhead in the pathological department, a University lecturer in Bacteriology and Preventive Medicine; and Dr. Haddon, the leader of the Cambridge Expedition to New Guinea and Borneo, a lecturer in Ethnology. On April 26th Mr. G. A. Auden, M.A., Christ's, was admitted to the degree of Doctor of Medicine, and Mr. B. R. B. Truman, B.A., of Trinity Hall, to the degrees of M.B. and B.C.

UNIVERSITY OF DURHAM.—At the Convocation held on April 28th the following degrees and diploma were conferred:—

Doctor in Medicine.—Vincent Burrow, M.B., B.S. Durh.; Ernest William Gilroy, M.B., B.S. Durh.; John Harris, B.A. Syd., M.B., B.S. Durh.; Ralph Albert Rogers Lankester, M.B., B.S. Durh.; John Lowry, M.B., B.S. Durh.; Gilbert Smith, M.B., B.S. Durh.; and Percy Hugh Wardell-Johnson, M.B., B.S. Durh. *(In absentia).*

Doctor in Medicine (Practitioners of 15 Years' Standing).—Thomas William Buckley, M.R.C.S. Eng., L.S.A.; William Edward Gillson, M.R.C.S. Eng., L.R.C.P. Lond., L.S.A.; Allan Grant Mackenzie, M.R.C.P., F.R.C.S. Edin.; Frederick William Dobson McGachen, L.F.P.S. Glasg., L.S.A., D.P.H.; George Samuel Wild, M.R.C.S. Eng., L.R.C.P. Edin.; and Vitruvius Harold Wyatt Wingrave, M.R.C.S. Eng., L.S.A.

Doctor in Hygiene (D.Hy.).—Robert Ayton Dunn, M.D., B.S., B.Hy. Durh.

Bachelor in Medicine (M.B.).—Christopher Osmond Bodman, M.R.C.S., L.R.C.P., University College, Bristol; Edleston Harvey Cooke, St. Thomas's Hospital; Frank Aaron Davies, Mason College, Birmingham; George Oswald Morrell Dickenson, Richard Henry

Dix, and Henry Eggleston, College of Medicine, Newcastle-upon-Tyne; Henry Reginald Ellis, M.R.C.S. Eng., L.R.C.P. Lond., St. Bartholomew's Hospital; Joseph James French, Charles Thomas Holmes, Maurice Jacobs, John Macfadyen, John Robert Mitchell, and Eliot Swainston, College of Medicine, Newcastle-upon-Tyne; William Johnston Symes, University College, Sheffield; and John Charles Velenski, St. George's Hospital and College of Medicine, Newcastle-upon-Tyne.

Bachelor in Surgery (B.S.).—Christopher Osmond Bodman, M.R.C.S., L.R.C.P., University College, Bristol; Edleston Harvey Cooke, St. Thomas's Hospital; Frank Aaron Davies, Mason College, Birmingham; George Oswald Morrell Dickenson, Richard Henry Dix, Henry Eggleston, Joseph James French, Charles Thomas Holmes, Maurice Jacobs, John Macfayden, and Eliot Swainston, College of Medicine, Newcastle-upon-Tyne; William Johnston Symes, University College, Sheffield; and John Charles Velenski, St. George's Hospital and College of Medicine, Newcastle-upon-Tyne.

Bachelor in Hygiene (B.Hy.).—Henry Edward Davison, M.B., B.S. Durh., M.R.C.S. Eng., L.R.C.P. Lond.

Diploma in Public Health (D.P.H.).—Arthur John Collis, M.A., M.B., B.S. Camb., M.R.C.S. Eng., L.R.C.P., and Sydney Duke Turner, M.R.C.S., L.R.C.P.

At the third examination for the degree of Bachelor in Medicine held at the College of Medicine, Newcastle-upon-Tyne, in April the following candidates satisfied the examiners:—

Second-class Honours.—Sydney Duke Turner, M.R.C.S., L.R.C.P., St. Thomas's Hospital; George Mack, College of Medicine, Newcastle-upon-Tyne; and Harry Carlile Sturdy, M.R.C.S., L.R.C.P., Guy's Hospital.

Pass List.—Stanley Cornell Clapham, M.R.C.S., L.R.C.P., Guy's Hospital; Mary Evelyn De Rusett, College of Medicine, Newcastle-upon-Tyne; Alice Maud Dodd and Mary Jane D'Vaz, London School of Medicine for Women; William Robert Davidson Daglish, College of Medicine, Newcastle-upon-Tyne; Evelyn John Evatt, Royal College of Surgeons, Ireland; Henry Wallace Furnivall, James Herries Graham, James Alfred Giles, Arthur Hines, Leonard Montgomery Markham, Ernest Edward Norman, and Robert William Nevin, College of Medicine, Newcastle-upon-Tyne; Michael Joseph Quirke, Mason College, Birmingham; Carl Anders Ryman, St. George's Hospital; Alfred Reid, Guy's Hospital; Ralph Stuart Renton, College of Medicine, Newcastle-upon-Tyne; Robert Walker, M.R.C.S., L.R.C.P., St. Bartholomew's Hospital; and Hugh Widdas, College of Medicine, Newcastle-upon-Tyne.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS OF EDINBURGH AND FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At the April sittings of the Conjoint Board, held in Glasgow, the following candidates passed the respective examinations:—

First Examination, Five Years' Course.—Bertram H. Watch, Anderson's College; John Watson (with distinction) and Thomas William Roberts, St. Mungo's College; and Ian Campbell and Thomas Edward Flitcroft, Anderson's College.

First Examination, Four Years' Course.—William Pritchard Airey, Anderson's and St. Mungo's Colleges; John Charles Grant, Newcastle; St. Clair G. Ballenden, Mason College, Birmingham; Lewis Edward Jarrett, Owens College, Manchester; and Edwin A. Shanks, Glasgow University and Anderson's College.

Second Examination, Five Years' Course.—William George Macdonald, St. Mungo's College; John Bertram L. S. Scott, Owens College; Albert Edward Griffith, Catholic University School of Medicine; Richard Lewis, University College, Liverpool, and Anderson's College; James Walsh, Edinburgh Schools; Timothy Foley, Queen's College, Cork; Charles A. Bruce-Whyte, Edinburgh Schools; Evan Owen Roberts, St. Mungo's College; Gerald W. Smithwick, Melbourne University; and Thomas Russell, University College of Medicine, Newcastle.

Second Examination, Four Years' Course.—Herbert Davis Pitt, Mason University College; William Pritchard Airey, Anderson's and St. Mungo's Colleges; John Dunlop, Edinburgh Schools; Michael Lyons, Queen's College, Cork; and Angus Macleod, Edinburgh University.

Third Examination.—John Reaside Smith, Anderson's College (with distinction); John M'Intyre, St. Mungo's College; Terence Aloysius Welch, Owens College; William Henry Duncan, Anderson's College and Glasgow University; Kennedy Jos. O'Brien, Edinburgh School; Harry Miller Roberts, St. Mungo's College; Thomas Ernest Harty, Queen's College, Cork; John William Isbister, St. Mungo's College; Archibald MacMillan, Anderson's College (with distinction); Anthony H. Corley, Queen's College, Belfast; Hugh Williams, St. Mungo's College; Louis Edward Staynes, Westminster Hospital; and Hugh De Mels, Ceylon Medical College.

Final Examination (and admitted Licentiates of the three Cooperating Colleges).—John Campbell Douglas, St. Mungo's College (with honours); Thomas Blane Adam, Anderson's and St. Mungo's Colleges; David Speid C. Reid, Anderson's College; Helen Sinclair Macdonald, London School of Medicine for Women and Queen Margaret College; W. Airlie Ogilvy, St. Mungo's College; John Thomas Moore, Dublin Schools; Sydney S. Menzies, London Schools and Mason University College; Arthur Harold Wilson, Mason University College; Matthew O'Halloran, Edinburgh; Gangakanta Nag, Medical College, Calcutta; Alexander Fraser Jack, St. Mungo's College; Owen Felix M'Carthy, Queen's College, Cork; Sidney Gerald Gomes, Ceylon Medical College; and William Mason, Anderson's College.

BRISTOL YOUNG PEOPLE'S ANTI-SMOKING LEAGUE.—This society was established last June on the occasion of a visit by Dr. Edmunds of London to the higher grade schools of the Bristol School Board. In November Dr. Martin of Manchester visited 25 other board schools and addressed the children and pupil teachers on the evils of cigarette smoking. As a result of these visits nearly 2000 young people, mostly boys, have signed the anti-smoking pledge. Nothing but sympathy can be felt for a movement which seeks to put down smoking amongst boys of tender age.

BARRY HOSPITAL.—Mr. G. Neale, L.R.C.P. & S. Edin., J.P., Mr. P. J. O'Donnell, L.R.C.S. Irel., and Mr. P. A. Kelly, L.R.C.P. Edin., L.R.C.S. Irel., have been elected medical representatives on the town hospital committee by the Barry District Council.

PRESENTATION TO A MEDICAL MAN.—On April 25th in the Reading-room, Kerry, North Wales, Mr. Frederick Wilson, M.B. Edin., was presented by the members of the St. John Ambulance Association, Kerry, with a silver spirit flask as a slight token of appreciation of his instructive lectures to the class on first aid.

MEDICAL MAGISTRATES.—The following gentlemen have been appointed magistrates for New South Wales by His Excellency the Lieutenant-Governor:—Malcolm L. Cameron, M.D., Ch.M. Canada, of Clarence River; Henry Wm. Devlin, M.R.C.P. Irel., of St. Asnot's, Miller-street, North Sydney; Thomas Carson Fisher, M.D. Dub., of Bolvral; Frank St. B. Gaden, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., of Grenfell; William Irwin, M.B., M.S. Glasg., of Singleton; James Kearney, L.K.Q.C.P., L.R.C.S. Irel., of Parramatta; George P. Lambert, M.R.C.S., of Berrima; Alexander John Park, M.B., C.M. Edin., of Narrabri; and John St. Clair Gunn, M.B., C.M. Glasg., of Marlborough, New Zealand, for that colony.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—The spring meeting of the South-Eastern Division of this association was held at the City of London Asylum, Dartford, on April 25th, when 22 members were present. In the morning a visit was paid to the asylum, upon which the Corporation of London have spent £80,000 during the last two or three years. A luncheon followed, after which the general meeting was held, when Dr. Ernest White, the medical superintendent of the asylum and divisional secretary, read a paper upon the Remodelling of an Old Asylum and Dr. Arthur Patterson one upon an Analysis of 1000 Consecutive Admissions into the City of London Asylum from Jan. 1st, 1892, to Dec. 31st, 1899. In the evening the members and visitors dined together at the Café Monico, Piccadilly-circus, W.

THE LATE MR. E. H. CROGHAN.—Mr. Edward H. Croghan, who died at Cape Town about a month ago after a long illness, had been for many years a well-known medical practitioner in several South African towns. It was very early in "the eighties" that he first arrived in South Africa and he settled in Kimberley, where he was in a year or two joined by his brother Mr. John Croghan. When the gold mines of the Rand rendered that district populous Mr. E. H. Croghan removed there from Kimberley and established a lucrative practice which he carried on as long as British subjects were allowed to remain. When the nurses of the Johannesburg Hospital were ordered to leave the town he accompanied them on their journey to Durban and was then appointed surgeon-captain to the Imperial Light Infantry. In a few weeks he was made surgeon-major, but in January the state of his health made it necessary for him to apply for leave of absence. Mr. Croghan was an enthusiastic Freemason and his name is perpetuated by the E. H. Croghan Lodge. He leaves a widow and two sons.

THE YORKSHIRE VETERINARY MEDICAL SOCIETY. The spring meeting of this society was held at the Queen's Hotel, Leeds, on Friday, April 27th, when the President, Mr. M. Robinson, of Barnsley presided. It was decided to appoint Mr. J. McKinna of Huddersfield to represent the society at the Conference of the Royal Institute of Public Health to be held in Aberdeen in August. Mr. H. G. Bowes of Leeds read a paper on "Diseases of Animals Communicable to Man." Mr. Bowes condemned the existing system under which each local authority was at liberty to adopt its own rules dealing with tuberculosis. What they wanted was a uniform method of dealing with the matter by a central authority such as the Board of Agriculture. Adverting to the question as to who were best qualified to inspect meat he said he thought the veterinary surgeon the most competent. The meat inspector was the most cosmopolitan of men—local authorities apparently vying with each other

in obtaining the least competent. Large towns, at any rate, ought to follow the example of Edinburgh and Manchester in appointing veterinary surgeons as meat inspectors. Mr. Bowes also dealt with the subjects of anthrax, glanders, and hydrophobia.

ON Tuesday, April 24th, Mr. John S. Crone, L.R.C.P.I., J.P., of Kensal Lodge, Kensal Rise, was unanimously elected chairman of the Willesden District Council for the ensuing year.

Parliamentary Intelligence.

HOUSE OF COMMONS.

THURSDAY, APRIL 26TH.

Vaccination in the St. Pancras Workhouse.

MR. CHANNING asked the President of the Local Government Board whether his attention had been called to the action of the medical officer of St. Pancras Workhouse in insisting on re-vaccinating children or young persons between 10 and 14 years of age without any application by them or their parents to the medical officer to revaccinate; and whether this procedure was in accordance with the Vaccination Order of October, 1896, having regard to the language of Section 3 of Schedule 2 of that Order.—Mr. CHAPLIN replied: I understand from the medical officer of the workhouse that in the great majority of cases the consent of the parents is obtained, but that there are some instances where this consent is not obtainable—as, for example, when the parents are dead or are insane or have deserted their children. I am not, however, fully informed of the practice of the medical officer in the matter referred to, but I find that the visiting committee of the workhouse have appointed a sub-committee to inquire generally into the practice of the medical officer as regards vaccination and re-vaccination and I have requested that a copy of the report of this sub-committee may be forwarded to me. On receipt of it I will consider whether any action on my part is necessary.

Expenditure under the Vaccination Act.

Mr. CHANNING asked the President of the Local Government Board whether he would consent to a return showing the expenditure out of the rates of the boards of guardians in each union of England and Wales in respect of vaccination in the year preceding the commencement of the Vaccination Act and in the year succeeding the commencement of that Act.—Mr. CHAPLIN replied: Particulars of the expenditure out of the rates in respect of vaccination in each financial year are given in the local taxation returns relating to that year and under these circumstances it does not seem to me necessary or desirable that a special return involving a great amount of labour such as that suggested by the hon. gentleman should be given.

The Pollution of the River Lee.

Mr. STEADMAN asked the First Lord of the Treasury whether, having regard to the state of the river Lee and the complaints which had been made with regard thereto by the various local authorities through whose districts the river runs, he was prepared to take the necessary steps for obtaining the re-appointment of the Select Committee on the Rivers Pollution (River Lee) which sat in 1896, and recommended that, in consequence of the dissolution of Parliament in that year, they should be appointed on the assembling of the next Parliament to consider their report on the evidence already taken, and, if desirable, to take further evidence.—Mr. BALFOUR replied: I understand that the view of the Local Government Board is that, as there is a Bill now before Parliament which has passed the Committee stage of this House to reconstitute the Lee Conservancy Board, the time does not seem opportune for appointing a Select Committee on the subject.

FRIDAY, APRIL 27TH.

The Edinburgh and St. Andrews Universities Vacancy.

At this sitting of the House a writ was issued for the election of a member to represent the Universities of Edinburgh and St. Andrews in the room of the late Sir William Priestley.

MONDAY, APRIL 30TH.

Plague Regulations in India.

Mr. MACLEAN asked the Secretary of State for India whether since the plague riot took place at Cawnpore the regulations had been modified and the compulsory removal of plague-stricken patients to hospital had been abolished, and why this change was not made before the riot broke out.—Lord GEORGE HAMILTON replied: The Viceroy has informed me by telegram that "the Lieutenant-Governor of the North-West Provinces arrived at Cawnpore on the day after the riot. He found the tumult due in part to gross ignorance, partly to unwillingness to submit to any plague preventive regulations, and partly to false reports that had been fomented by Marwaris who are foreigners. The Lieutenant-Governor issued a notification explaining the regulations and on April 16th (five days after the riot) shops were opened and business was resumed." I have received no further information on the subject of the hon. member's question and I do not expect to receive any until detailed reports on the occurrences reach me.—Mr. MACLEAN: Were the regulations modified?—Lord GEORGE HAMILTON replied: I cannot answer that but they were not withdrawn.

Deaths from Carbolic Acid.

Sir JOHN LENG asked the Home Secretary if he had observed that the reports of the Registrar-General show that the scheduling of poisons had greatly diminished the number of fatalities from their accidental or suicidal use and had not interfered with the use of potent poisons, such as arsenic and potassium cyanide, for industrial purposes, while from the report for 1898 recently issued it appears that the fatalities from carbolic acid alone number 206, being nearly as many as for the whole of the scheduled poisons; whether he was aware that since he stated last session that the Privy Council were prepared to consider whether carbolic acid could be advantageously dealt with in some way but could not take any step except on the resolution of the Pharmaceutical Society, the council of that society had passed a resolution declaring that carbolic acids in crystals, commercial carbolic acid, and liquids containing more than 3 per cent. of phenol were to be deemed poisons and added to the second part of Schedule A of the Pharmacy Act; whether, although that resolution was communicated to the Privy Council in July last, it had not yet sanctioned the resolution; and whether he would represent to the Privy Council the expediency of at once giving effect to it with the view of preventing many cases of suffering and death?—Sir MATTHEW WHITE RIDLEY replied: Without going in detail into the first paragraph of the question I think there is no doubt that the number of deaths caused by carbolic acid is deplorably great and shows that some remedy is desirable. I am informed that the Pharmaceutical Society have passed a resolution in the terms quoted by the hon. Member, but I must explain that the matter is by no means a simple one. It is, however, now under the active consideration of the departments concerned in consultation with the society with good prospects, I hope, of steps being taken in the direction desired.—Dr. TANNER: Shall we have a systematic return dealing with the whole matter?—Sir MATTHEW WHITE RIDLEY replied: It is not a question that concerns my Department. I am really answering for the Privy Council and, as I understand, the question is moving forward.

TUESDAY, MAY 1ST.

Superannuation Allowances for Medical Officers of Health.

On the motion of Dr. FARQUHARSON a Bill was introduced and read a first time "to amend the law relating to medical officers of health, inspectors of nuisances, and sanitary inspectors, and to provide for superannuation allowances to such officers and inspectors, and for contribution towards such allowances by such officers and inspectors, and make other relative provisions." The Bill consists of 29 clauses and covers all the officers mentioned in the title by saying in the definition clause that the term "officer of health" includes a medical officer of health, an inspector of nuisances, and a sanitary inspector under the Public Health Act, 1875, and the Public Health (London) Act, 1891, or either of them. On the subject of tenure of office the measure proposes that subject to the provisions of the Act every officer of health shall hold office until he die, or resign, or be required by the local authority after attaining the age of 65 years to retire under the superannuation provisions, or be removed by the local authority with the consent of the Local Government Board, or be removed by that Board, or be proved to be insane by evidence which that Board shall deem sufficient. Provision is made for suspension from duty by the local authority and for cases of temporary disability. The superannuation clauses set forth that every officer of health who shall become incapable of discharging the duties of his office with efficiency by reason of permanent infirmity of mind or body or of old age or who shall have completed an aggregate service of 40 years or who shall have attained the full age of 65 years shall be entitled to receive during life a superannuation allowance. The officer who has served for 10 years but less than 11 shall be entitled to an annual allowance equal to ten-sixtieths of the average amount of his salary during the previous five years, and it is proposed to add one-sixtieth for every additional year of service until the completion of a period of 40 years when the maximum allowance of forty-sixtieths shall be granted. Provision is made for the officer to contribute annually a percentage amount of his salary and there are a number of other clauses in the Bill which the exigencies of space do not permit us to explain.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.

ARMSTRONG, J., L.R.C.P., L.R.C.S. Irel., has been appointed Certifying Surgeon under the Factory Acts for the Ballymahon Dispensary District in the county of Longford.

BORTHWICK, THOMAS, M.D., Ch.M. Edin., has been appointed Medical Officer for the City of Adelaide, Australia.

BUCHAN, A. HILL, M.A., M.B., C.M., M.R.C.S. Edin., has been appointed an Assistant Physician to the Leith Hospital.

CARTER, STUART, L.D.S. (R.C.S. Eng.), has been appointed Honorary Assistant Dental Surgeon at the Royal United Hospital, Bath.

CHEESMAN, E. R., L.S.A. Lond., has been appointed Public Vaccinator for Chewton Mendip (Somerset), by the Wells Board of Guardians, vice G. O. Risdon, resigned.

COTMAN, H. H., L.S.A., has been appointed House Physician to the Seamen's Hospital, Greenwich.

CROMMELIN, C. R., M.D. Cincinnati, has been appointed Government Medical Officer and Vaccinator at Campbelltown, New South Wales, vice C. N. Simons, resigned.

CULLINAN, N., M.D. Brux., L.R.C.P., L.R.C.S., L.F.P. & S. Glasg., D.P.H., has been re-appointed Medical Officer of Health for Risca, Mon.

EASON, JOHN, M.B., C.M., M.R.C.P. Edin., has been appointed an Assistant Physician and Registrar to the Leith Hospital.

EDDISON, F. R., M.R.C.S., L.R.C.P. Lond., has been appointed Senior Resident Medical Officer to the Royal Free Hospital, Gray's-inn-road.

ELLIOTT, J., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Islandshire Sanitary District of the Berwick-on-Tweed Union, vice J. Lambie, resigned.

EWING, S. A., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., D.P.H. Camb., M.R.C.S., has been appointed Health Officer to the Kanowna Local Board of Health, West Australia.

FARMANE, SAMUEL, M.R.C.S., L.S.A., Surgeon-Lieutenant-Colonel West Somerset Yeomanry, has been appointed to take medical charge of the troops at Taunton.

FLYNN, E. F., L.R.C.P., L.R.C.S. Irel., has been appointed Certifying Surgeon under the Factory Acts for the Union of Dungarvan in the county of Waterford.

GASS, R. B., M.B., C.M. Edin., has been re-appointed Medical Officer of Health by the Heysham Urban District Council.

GASTER, S., M.R.C.S., L.R.C.P. Lond., has been appointed Casualty House Surgeon to the Royal Free Hospital, Gray's-inn-road.

GILLIES, S., M.D. Lond., D.P.H. Camb., has been appointed *pro tem.*, to act as an Official Visitor to the Hospital for the Insane, Parramatta and the Licensed House for the Insane, Cook's River, Sydney, New South Wales.

HADFIELD, P. HEYWOOD, M.A., L.R.C.S. & P. Edin., L.F.P. & S. Glasg., has been appointed Senior House Surgeon at the Stanley Hospital, Liverpool.

HAMILTON, GRAEME, M.B., Ch.B. Edinburgh, has been appointed Senior House Surgeon to the Children's Infirmary, Liverpool.

HAWTHORNE, C. O., M.D. Glasg., M.R.C.P. Lond., has been appointed Assistant Physician to the Royal Hospital for Children and Women, Waterloo Bridge-road, London.

JONES, T. E., L.R.C.P. Lond., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Urban District of Llangefni and Rural District of Twrcelyn.

KIRKPATRICK, STEWART, L.R.C.P., L.R.C.S. Edin., L.F.P. & S. Glasg., has been appointed by the War Office as Civilian Medical Officer, and to take up his duties at York—Home Service.

KYLE, H. G., B.A., M.B., B.Ch. Oxon., has been appointed House Physician to the Royal Free Hospital, Gray's-Inn-road.

LAPRAIK, G., M.B., C.M. Glasg., has been appointed a Public Vaccinator for the district of Thames, New Zealand.

LYS, GEORGE, L.R.C.P., Lond., M.R.C.S., has been appointed Medical Officer for the Bere Regis Sanitary District of the Wareham and Purbeck Union, vice F. D. Lys, resigned.

MACKINNON, W. J., M.B., C.M. Glasg., has been appointed Certifying Surgeon under the Factory Acts for the Biggar District, which comprises the civil parishes of Biggar, Covington, and Thankerton, Crawford, Culter, Crawfordjohn, Libberton, Lamington, and Wandel, Symington, Wiston, and Roberton and Walston in the county of Lanark.

MEREDITH, R. W. H., M.R.C.S., L.R.C.P., has been appointed House Surgeon to the Seamen's Hospital, Greenwich.

MULLEN, W. L., M.D., Ch.B. Melb., has been appointed, *pro tem.*, Acting Medical Superintendent of the Metropolitan Lunatic Asylum, Kew, Victoria, Australia.

NOLANS, F., L.R.C.P., L.R.C.S. Irel., has been appointed Certifying Surgeon under the Factory Acts for the Gorey Dispensary District in the county of Wexford.

RITCHIE, R. H., M.B., Ch.B. Melb., has been appointed Officer of Health for the Shire of Arapnes, Victoria, Australia.

ROBERTS, H. H., M.B., Ch.B. Edin., has been appointed Medical Officer to the Glanmour Foundry Workmen, Llanelly.

RYGATE, C. D. H., L.R.C.P. Lond., M.R.C.S., has been appointed Government Medical Officer and Vaccinator at Wellington, New South Wales.

STAPLETON, E. F., M.B., B.Ch., B.A.O. (T.C.D.), has been appointed House Surgeon to the Royal Free Hospital, Gray's-Inn-road.

STEELL, J., M.B., Ch.M. Edin., has been appointed, *pro tem.*, acting Medical Superintendent of the Yarra Bend Lunatic Asylum, Melbourne, Victoria, Australia.

STRATON, C. H., L.R.C.P., F.R.C.S. Edin., has been re-appointed Medical Officer of Health by the Wilton Urban Sanitary Authority.

TEAGUE, D. G. M., M.B., C.M. Edin., has been appointed Medical Officer of the Mount Garnet Hospital, Chilagoe District, Queensland.

THAIN, L. L., M.R.C.S., has been appointed Medical Officer for the Kentchurch Sanitary District and the Workhouse of the Dore Union, vice W. M. Jennings, resigned.

THWAITES, J. S., M.B. Melb., has been appointed Officer of Health for the United Shire of Newham, Victoria, Australia.

WOODFORDE, R. E. H., L.R.C.P., Lond., M.R.C.S., has been appointed Medical Officer for the Third Sanitary District of the Royston Union, vice J. G. Robertson, deceased.

Vacancies.

For further Information regarding each vacancy reference should be made to the advertisement (see Index).

BIRMINGHAM GENERAL DISPENSARY.—Three qualified Resident Locums for from two to three months' consecutive engagement. Terms 4 guineas per week, with furnished apartments.

BIRMINGHAM AND MIDLAND EYE HOSPITAL, Birmingham.—Assistant House Surgeon. Salary £60 per annum, with apartments and board.

BIRMINGHAM AND MIDLAND FREE HOSPITAL FOR SICK CHILDREN, Birmingham.—Resident Medical Officer and a Resident Surgical Officer. Salary £60 each per annum with board, washing, and attendance in the hospital.

BOROUGH HOSPITAL, Bootle, Liverpool.—Senior Resident Medical Officer. Salary £100 per annum, with board, &c.

CARDIFF INFIRMARY.—Assistant House Physician for six months. Salary at the rate of £50 per annum, with board, washing, and apartments.

CARLISLE DISPENSARY.—House Surgeon. Salary £130 per annum, with apartments (not board).

CHILDREN'S HOSPITAL, Nottingham.—House Surgeon (non-resident) for six months. Salary at the rate of £100 per annum.

CITY ASYLUM, Nottingham.—Second Assistant Medical Officer, unmarried. Salary £130, with board, apartments, and washing.

CITY OF GLASGOW FEVER HOSPITAL.—Physician Superintendent at the Belvedere Hospital. Salary £400 per annum, with house accommodation, board, and attendance. Applications to Mr. J Lindsay, City Chambers, Glasgow.

CLAYTON HOSPITAL AND WAKEFIELD GENERAL DISPENSARY, Wakefield.—Senior House Surgeon, unmarried. Salary (during the wa £150 per annum, with board, lodging, and washing.

COUNTY ASYLUM, Rainhill, near Liverpool.—Assistant Medical Office r to act as Locum Tenens for about four months during the summer. Salary £3 3s. per week, with furnished apartments and board.

CUMBERLAND AND WESTMORLAND ASYLUM, Garlands, Carlisle.—Junior Assistant Medical Officer, unmarried. Salary £130 a year, rising to £150, with board, residence, &c.

DENBIGHSHIRE INFIRMARY, Denbigh.—House Surgeon for 12 months. Salary £80, with board, residence, and washing.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY, Dumfries.—House Surgeon. Salary £50 per annum, with board and washing.

DUNDEE ROYAL INFIRMARY.—Resident Medical Assistant for six months. Salary at the rate of £40 per annum, with board and washing.

DURHAM COUNTY ASYLUM, Winterton, Ferryhill.—Second Assistant Medical Officer. Salary £170 per annum, rising £10 annually, to £220, with rooms, board, laundry, and attendance.

FARRINGDON GENERAL DISPENSARY, 17, Bartlett's-buildings, Holborn circus, London.—Resident Medical Officer. Salary £120 per annum, with apartments, coals, gas, and attendance and permission to take resident pupils.

GATESHEAD UNION.—Assistant Resident Medical Officer for the Workhouse. Salary £150 per annum, with furnished apartments, rations, and washing. Subject to superannuation deduction. Applications to the Union Clerk, Offices, Prince Consort-road, Gateshead.

GENERAL INFIRMARY at Leeds.—House Surgeon for twelve months. Board, lodging, and washing provided. Also Resident Medical Officer. Salary £100 per annum, with board, residence, and washing.

HOSPITAL FOR DISEASES OF THE THROAT, Golden-square, London.—Senior Clinical Assistant.

LONDON TEMPERANCE HOSPITAL, Hampstead-road, N.W.—Assistant Resident Medical Officer for six months. Honorarium given at the rate of 50 guineas per annum, residence in the hospital, with board and washing.

LOUGHBOROUGH AND DISTRICT GENERAL HOSPITAL AND DISPENSARY, Loughborough.—Resident House Surgeon. Salary £100 per annum, with furnished rooms, attendance, and board.

MANCHESTER CHILDREN'S HOSPITAL, Pendlebury.—Medical Officer for the Dispensary of the above Institution. Salary £180 per annum. Applications to the Secretary, Children's Dispensary, Gartside-street, Manchester.

MANCHESTER ROYAL EYE HOSPITAL.—Junior House Surgeon. Salary £70 per annum, with residence, board, and washing.

MIDDLESEX HOSPITAL, W.—Dental Surgeon.

MILLER HOSPITAL AND ROYAL KENT DISPENSARY, Greenwich-road, S.E.—Junior Resident Medical Officer for six months. Salary at the rate of £40 per annum, with board, attendance, and washing.

NORTHAMPTON GENERAL INFIRMARY.—Qualified Assistant to the House Surgeon for six months. Honorarium £25, with board, lodging, and washing.

NORTH-WEST LONDON HOSPITAL, Kentish Town-road.—Resident Medical Officer and Assistant Resident Medical Officer for six months. Salaries at the rate of £50 per annum each.

NOTTINGHAM GENERAL DISPENSARY.—Assistant Resident Surgeon, unmarried. Salary £140 per annum, all found, except board.

PECKHAM HOUSE, Peckham.—Assistant Medical Officer. Salary £150 per annum.

POPLAR HOSPITAL FOR ACCIDENTS, Poplar, London.—Assistant House Surgeon for six months. Salary at the rate of £65 per annum, with board and residence.

ROYAL DEVON AND EXETER HOSPITAL, Exeter.—Assistant House Surgeon for six months. Salary at the rate of £100 per annum, with board, lodging, and washing. Also Junior Assistant House Surgeon for six months. Board, lodging, and washing provided.

ROYAL HALIFAX INFIRMARY.—Third House Surgeon, unmarried. Salary £50 per annum, with residence, board, and washing.

ROYAL SOUTHERN HOSPITAL, Liverpool.—Second and Third House Surgeons. Salary 80 and 60 guineas per annum.

ST. MARY'S CHILDREN'S HOSPITAL, Plaistow, E.—Assistant Resident Medical Officer for six months, unmarried. Salary £80 per annum, with board, residence, laundry, &c.

SALOP INFIRMARY, Shrewsbury.—Assistant House Surgeon for six months. Salary at the rate of £40 per annum, with board and washing.

SCARBOROUGH HOSPITAL AND DISPENSARY.—Junior House Surgeon for six months. Salary £50 per annum, with residence, board, and washing.

SOUTH DEVON AND EAST CORNWALL HOSPITAL, Plymouth.—Assistant House Surgeon for six months. Salary at the rate of £50 per annum, with board and residence.

STOCKPORT INFIRMARY.—House Surgeon. Salary £100 per annum, with residence, board, and washing.

SURREY COUNTY ASYLUM, Brookwood, near Woking.—Third Assistant Medical Officer, unmarried. Salary £120, rising £10 annually to £150, with board, lodging, attendance, and laundry.

TEIGNMOUTH HOSPITAL, South Devon.—House Surgeon. Salary £50 per annum, with board, lodging, and washing. £6 per annum allowed in lieu of stimulants.

THE CHIEF INSPECTOR OF FACTORIES gives notice of vacancies for Certifying Surgeons under the Factory Acts at Howden in the East Riding of the County of York, at Osmotherley in the North Riding of the County of York, at Southend in the County of Essex, and at Selkirk, in the County of Selkirk.

THREE COUNTIES ASYLUM, near Hitchin.—Second Assistant Medical Officer, unmarried. Salary commencing at £150 per annum, with board, apartments, washing, and attendance.

VICTORIA HOSPITAL FOR CHILDREN, Queen's-road, Chelsea, S.W.—Resident Medical Officer for six months. Honorarium £25, with board and lodging in the hospital. Also Assistant Physician to the Out-patients for two years.

WANDSWORTH AND CLAPHAM UNION INFIRMARY, St. John's-hill, near Clapham-junction.—Junior Assistant Medical Officer for three months. Salary at the rate of £80 per annum, with board, lodging, and washing.

YORK DISPENSARY,—Resident Medical Officer, unmarried. Salary £110 a year, with board, lodging, and attendance.

YORK LUNATIC ASYLUM, Bootham, York.—Assistant Resident Medical Officer. Salary £130 a year, with board, washing, and attendance.

Births, Marriages, and Deaths.

BIRTHS.

CARRUTHERS.—On Monday, April 30th, at 44, Central-hill, Norwood, the wife of S. W. Carruthers, M.D., of a daughter.

CHEYNE.—On April 28th, at 75, Harley-street, Cavendish-square, W., the wife of W. Watson Cheyne, Esq., F.R.C.S., F.R.S., &c., of a daughter.

HORTON-SMITH.—On April 27th, at Upper Westbourne-terrace, W., the wife of Percival Horton-Smith, M.D., F.R.C.P., of a daughter.

MARSDEN.—On May 1st, at "Harrock," Lightcliffe, Yorks, the wife of J. A. Marsden, M.R.C.S., of a son.

SCOTT.—On April 26th, at Madeira House, Shanklin, I.W., the wife of W. Whitelaw Scott, L.R.C.S.I., L.K.Q.C.P.I., of a son.

TURNER.—April 29th, at Amersham, Bucks, the wife of Frederic Senior Turner, M.R.C.S., L.R.C.P. Lond., of a daughter.

MARRIAGES

BOWEN-DAVIES—BURTON.—On the 26th of April, at St. Mary's Church, Denbigh, by the Rev. J. A. Burton, cousin of the bride, assisted by the Rev. Dan Davies, rector, and H. Eaton Thomas, senior curate, Wm. Lloyd Bowen-Davies, M.R.C.S. Eng., L.R.C.P. Lond., St. Asaph, second son of Wm. Bowen-Davies, Broad Oak House, Golden Grove, Carmarthen, to Harriette Alice, only daughter of Frederick Burton, Gwaynynog, Denbigh, and Hopefield, Pendleton, Manchester.

DUFFETT—WOOD.—On April 28th, at St. John's Church, Upper St. Leonards, Henry Allcroft Duffett, F.R.C.S., of Withy Holt, Sidcup, Kent, to Elizabeth Gertrude, daughter of Charles Wood, of Charles-road, St. Leonards-on-Sea and Lincoln's Inn, Barrister-at-law.

FINLEY—MCKELVIE.—On April 25th, at St. John's Church, Hensingham, Cumberland, by the Rev. G. E. Gilbanks, M.A., of Abbey-Town, assisted by the Rev. W. H. Wilkinson, vicar of the parish, Harry Finley, M.D. Lond., of West Malvern, Worcestershire, to Lilian, elder daughter of the late John McKelvie of Whitehaven, and of Mrs. McKelvie, the Cross, Hensingham.

MAY—HILL.—On April 25th, at St. George's Church, Hanover-square, W., Henry E. May, M.A., M.B. Camb., of St. Albans, to Ethel Mary, daughter of the late T. Rowland Hill, of Tunbridge Wells.

NORMAN—CHEESE.—On April 25th, at St. Mary Abbot's, Kensington, Albert Norman, L.R.C.P., L.R.C.S., F.R.M.S., youngest son of the late James Norman, of East Southernhay, Exeter, to Julia Elizabeth, youngest daughter of James Cheese, of Cornwall-gardens, South Kensington.

PARKER-CATER—CLEMENT-SMITH.—On April 28th, at St. Luke's Church, Richmond, Alfred Parker-Cater, L.D.S., R.C.S.E., of St. Mary's-grove, Stafford, to Charle, second daughter of Dr. Clement-Smith of Argyll Hall Torquay.

POOLE—SWIRE.—On April 28th, at St. Leonard's Church, Newark, John Copeland Poole, M.R.C.S., of Hampton Wick, to Margaret, youngest daughter of the late Rev. Frederick Swire, rector of Elston, of Appleton-gate, Newark.

RUTHERFORD—PRIOR.—On April 26th, at Christ Church, Gipsy-hill, Alfred Ernest Ralf Rutherford, M.R.C.S., L.R.C.P. London, of Upper Norwood, to Ellen Ada, youngest daughter of the late Edward George Prior of Balham.

SHANN—RAE.—On April 25th, at the Marylebone Parish Church, William Arthur Shann, M.B. Cantab., of Lowestoft, to Clara R. Rae, widow of Captain V. R. Rae (P.W.O.), West Yorkshire Regiment.

SHRARER—WOOLLEY.—On April 25th, at the parish church, Beckenham, Robert Plenderleith Shearer, M.B., of Ruddington, Nottingham, to Lilian Boyle, second daughter of T. Boyle Woolley, Selwood, Beckenham.

TUXFORD—SUMMERS.—On April 26th, at St. Luke's Church, Southampton, by the Rev. O. G. Owen, Reginald Tuxford, M.R.C.S. Eng., L.R.C.P. Lond., second son of Dr. Arthur Tuxford, J.P., Boston, to Bertha, second daughter of T. Summers, Southampton.

WROUGHTON—HAVERS.—On April 26th, at St. James's Church, Tunbridge Wells, William Charles Haultain Wroughton, M.R.C.S., L.R.C.P. Lond., fourth son of Colonel W. N. Wroughton, Indian Staff Corps, to Rose Edith, only daughter of the late J. C. Havers, Esq., of Joyce Grove, Oxon.

DEATHS.

CLARKE.—On April 23rd, at 150, New Hall-lane, Preston, of pneumonia, after a short illness, J. K. Clarke, M.R.C.S., L.R.C.P.

NEWMAN.—On April 23rd, at St. Martin's, Bowness, Windermere, Anthony John Newman, L.R.C.P. Ed., M.R.C.S., aged 59 years.

WIBLIN.—On April 27th, at Northleigh, Wimborne Minster, Dorset, John Wiblin, F.R.C.S. Eng., in his 87th year.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Notes, Short Comments, and Answers to Correspondents.

A CHAT WITH A CELEBRITY.

A CORRESPONDENT has sent us a page from a periodical entitled *Home Life* and asks us what we think of it. Under the heading "Chats with Celebrities" we are introduced to a person named Ada S. Ballin who "has a world-wide reputation as an authority on health." Mrs. Ballin says that she has the names of 10,000 patients on her books and that her fee for consultation or treatment is one guinea though she makes a reduction for "governesses or other poor women who have struggled for a living or in the case of servants." It has been necessary owing to the number of persons who have "benefitted" from her advice for her to move from her pretty home in —— Park to a more central position in ——, where she has, in the opinion of the writer of the article, "the handsomest visiting- and consulting-rooms in London." What we think of the whole thing is that it is the usual puff of a person living, and according to her own account living very comfortably, upon unqualified medical practice as a dermatological specialist.

THE NEALE TESTIMONIAL FUND.

THE following subscriptions have been received by Mr. MacAlister for this fund. It is proposed to close the list very shortly, and it is, therefore, earnestly hoped that those who intend to subscribe will send in their subscriptions to Mr. J. Y. W. MacAlister, 20, Hanover-square, without delay. Cheques should be made payable to "Bearer" and crossed "Neale Testimonial a/c, National Provincial Bank."

	£	s.	d.
Sir William Turner, F.R.S.	1	1	0
Dr. E. Wolfenden Collins	1	1	0
Mr. Thomas Bryant ...	3	3	0
Dr. Amand Routh... ...	2	2	0
Dr. T. Stretch Dowse ...	3	3	0
Mr. W. Nutt Galton ...	1	1	0
Mr. George P. Field ...	2	2	0
Dr. C. J. Cullingworth	2	2	0
Mr. E. Noble Smith ...	3	3	0
Dr. T. Clifford Allbutt, F.R.S.	1	1	0
Mr. E. F. Cooper	0	10	6
K....	0	10	0
Dr. G. Fielding Blandford...	1	1	0
Sir T. Lauder Brunton, F.R.S.	5	5	0
Mr. R. J. Pye-Smith ...	1	1	0
Eliz. Garrett Anderson, M.D. Paris	1	1	0
Mr. Christopher Heath	1	1	0
Mr. Henry Power	1	1	0
Dr. Frederick T. Roberts	1	1	0
The Bristol Medical Library	1	1	0
Sir Douglas Powell... ...	2	2	0
Mr. Malcom Morris ...	1	1	0
Sir William Broadbent, F.R.S.	5	5	0
Dr. F. W. Pavy, F.R.S.	2	2	0
Mr. A. Pearce Gould ...	1	1	0
Mr. Alban Doran	1	1	0
Dr. Sidney Martin, F.R.S	1	1	0
Sir Thomas Smith... ...	1	1	0
Dr. J. Ford Anderson ...	1	1	0
Dr. J. Moorhead	1	1	0
Dr. W. P. Herringham...	1	1	0
Dr. A. Foxwell	1	1	0
Dr. Byrom Bramwell ...	5	0	0
Dr. Wharton Hood ...	1	1	0
Dr. T. F. Chavasse ...	1	1	0
Mr. Edward Nettleship..	1	1	0
Dr. E. W. Goodall... ...	1	1	0
Sir Edwin Saunders ...	1	1	0
Mr. Herbert Allingham	2	2	0
Dr. J. Abercrombie ...	1	1	0
Dr. Thomas Buzzard ...	2	2	0
Mr. R. Clement Lucas ...	1	1	0
Dr. A. P. Luff...	0	10	6
Dr. G. H. Savage	1	1	0
Dr. Cooper Rose	1	1	0
Dr. W. S. Church	1	1	0
Mr. H. H. Clutton... ...	1	1	0
Lord Lister, P.R.S. ...	5	0	0
Dr. J. J. Macwhirter Dunbar	1	1	0
Mr. R. Unwin Berry ...	2	2	0
Dr. T. D. Savill	0	10	6
Dr. Charles Contes	5	5	0
Dr. A. B Carpenter ...	1	1	0
Mr. C. R B. Keetley ...	1	1	0
Mr. Edward Wood... ...	0	10	6
Dr. W. B. Cheadle... ...	1	1	0
Mr. D'Arcy Power... ...	0	10	6
Mr. W. Adams Frost ...	2	2	0
Dr. A. Fraser	1	1	0
Dr. K. Grube	1	1	0
Dr. A. Donald...	0	10	6
Dr. F. P. Weaver	1	1	0
Dr. W. Allen Sturge ...	1	1	0
Mr. S. J. Sharkey	1	1	0
Dr. R. Clifford Beale ...	1	1	0
Mr. T. Holmes...	1	1	0
Dr. G. Sims Woodhead...	1	1	0
Dr. James Little	2	2	0
Mr. G. Anderson Critchett	2	2	0
Mr. W. H. Bennett ...	2	2	0
Dr. P. Horrocks	1	1	0
Dr. F. de Havilland Hall	1	1	0
Mr. H. G. Howse	3	3	0
Dr. H. Pye-Smith, P.R.S.	2	2	0
Mr. J. Adams Rawlings	0	5	0
Dr. R. A. Gibbons	1	1	0
Mr. John Ewens	0	2	6
Dr. A. Haig	1	1	0

TROPON AND PLASMON.

To the Editors of THE LANCET.

SIRS,—Would you or any of your readers be kind enough to inform me as to the dietetic value of "Tropon" and "Plasmon," and if they are genuine food-stuffs which is the better of the two?

I am, Sirs, yours faithfully,

April 26th, 1900. O. H.

*** An analysis of tropon appeared in THE LANCET of June 18th, 1898. Plasmon is described as a soluble proteid derived from milk. We have not yet submitted it to analysis.—ED. L.

THE ART OF OBSERVATION.

LEADING men in all walks of life are frequently made the subject of anecdotes which are too often the product of the imaginative brain of the good story-teller, and medical men do not form exceptions to the general rule. We all know the story told of a well-known Scotchman who on pointing out to his students the pathological significance of certain marks on a patient's teeth was somewhat startled when

the patient removed his false apparatus of mastication. Equally well known is the story of the professor who while pointing out the meaning of the unequal size of a patient's pupils was discomfited on discovering that one eye was made of glass. The May issue of the *Phonographic Record*, in commenting on the mistake of a foreign professor who, on hearing that a patient suffering from bronchial catarrh was a musician, immediately told his students that here he had an illustration of the effects of blowing wind instruments, but subsequently found that the man only played a big drum, makes itself responsible for the following story. A French professor was demonstrating to the obstetrical class the presentation, remarking that he felt the eyes, nose, cheek bones, &c., and finishing up with, "And now I pass my finger into the mouth, Voilà"; with this the professor withdraws his finger, which to the amusement of the students is seen to be covered with meconium.

AN INCLUSIVE ANNUAL SUM TO COVER MEDICAL ATTENDANCE FOR ACCIDENTS.

To the Editors of THE LANCET.

SIRS,—I have lately been appointed surgeon to a large engineering works employing about 2000 hands. They have paid separately for each patient they sent me who sustained an accident at the factory, but they now want to make a regular fixed payment to avoid all trouble. I should be glad if any of your subscribers would give me any information as to what is the usual charge per head per man for *accidents only* as I do not quite know what to charge. I take it that a certain annual sum per head should be charged. Any information from any of your subscribers who hold similar appointments would be of great service.

I am, Sirs, yours faithfully,

May 1st, 1900. AN OLD SUBSCRIBER.

DAMAGES CLAIMED FOR ANTENATAL INJURIES.

THE *St. Louis Courier of Medicine*, published in Missouri, U.S.A., states that "the Supreme Court of Illinois has recently handed down a decision in a peculiar case. It was that of an infant who claimed damages for a deformity alleged to have resulted from injury to the mother before its birth. The mother, while pregnant, was injured in an elevator accident at St. Luke's Hospital, Chicago, her left leg being caught and crushed. When the child was born, his left leg was deformed. The hospital authorities settled with the woman for her injuries, and then she brought suit in the child's name for $50,000 damages for the deformity, which it was claimed was due to the same accident. The Court dismissed the suit on the ground that at the time of the accident the child could not be credited as a separate being capable of sustaining an action independently of the mother."

WANTED—A PISTOLS BILL.

THE advocates of free shooting who objected to the Pistols Bill introduced into the House of Commons some time back will be interested in a case which formed the subject of an inquest at the Banbury Infirmary on May 1st. Shortly the story was that a boy named Hale had fired a toy pistol at another boy named Plummer with the result that the bullet entered Plummer's brain and he died. The jury in returning a verdict of "Death from misadventure" added a rider protesting against the sale of pistols to children. We trust that their protest will have some effect.

THE INEBRIATES ACT.

THE perennial difficulty which arises in cases coming under this Act found a fresh illustration in a charge heard before Mr. Hopkins at Lambeth Police-court on May 1st. A young woman was charged with being drunk and disorderly, and the case had been adjourned in order that if possible a home might be found for her. It was stated that the London County Council has at present made arrangements with the managers of only two houses—namely, that at Ashford for Roman Catholic women and that at Duxhurst for those who are not Roman Catholics. An application to Duxhurst had elicited the reply that the home was full. Mr. Hopkins, after remarking upon the inadequacy of accommodation, sent the prisoner to gaol for 14 days. The Inebriates Act is at present almost a dead letter, and the worst feature of the matter is that persons who are really suffering from an illness, albeit self-acquired, have to expiate their sin by the same process as have criminals, owing to there being no means to carry out the provisions of the Act.

Consumptive.—We published in THE LANCET of Sept. 9th and Sept. 23rd, 1899, information concerning existing British open-air sanatoria for patients suffering from tuberculosis who are able to pay for their treatment. Most of these are in the open country and two are in the well-favoured town of Bournemouth. The east coast, so well known for its dry, bracing climate, possesses two and will soon have a third under the direction of Dr. Burton-Fanning. In the west of England there are two excellent establishments, on the Mendips and the Cotewolds respectively. Both of these are at a considerable elevation (for England) above the sea-level. Others are situated respectively on the edge of the New Forest, on the slopes of the Malvern Hills, and on the Sussex moors, while yet another will shortly be opened on the pine-clad hills which look towards the Hindhead in Surrey. In Ireland a sanatorium has been recently started at Rostrevor, but in Scotland, the pioneer in open-air sanatoria for the poor, we know of none for the middle and upper classes. Nearly all the existing British institutions have had to increase their accommodation owing to the large demand for beds. Most of them have been greatly influenced by the methods of Dr. Walther of Nordrach in Germany. The fees payable vary from two to seven guineas per week, although we believe that a few beds for the middle classes can occasionally be had for less. Small fees can only be remunerative where the accommodation is very simple, unless electric lighting and other heavy items of expense are omitted.

Inquirer.—(1) The address of the *Clinical Journal* is 34, Welbeck-street, W., and that of *Treatment*, 11, Adam-street, Strand, W.C.; (2) the address of the *Deutsche Medicinische Wochenschrift* is Berlin; (3) the name Kernig's sign is given to the following phenomenon—ability to extend the thighs with ease when lying down but only with difficulty when sitting.

G. P.—Our correspondent should read "Vaccination Vindicated" by Dr. J. C. McVail. The book is a complete exposure of the statistical sophistries of the leading anti-vaccinationists. The Jenner Society (hon. sec. Dr. Francis T. Bond, Gloucester) have some copies, we believe, for sale, price 5*s*.

Perplexed.—We see no reason why our correspondent should not please himself. How he should employ time that he can spare from his practice is a matter for his own consideration only, and he may be able to place his technical skill at the disposal of his brother practitioners.

L. G. P.—A coroner's duty is not only to hold inquests but also to decide if they ought to be held. Probably the coroner was in possession of information that in his opinion made it certain that the death was natural.

M.P.—A radical cure might be performed. The Naval Medical Department publishes a list of the conditions which disqualify in which the exact condition is not mentioned.

Etiquette should be advised by his partner or by some practitioner of long standing in his neighbourhood. The custom varies in different districts.

J. J. I.—We do not understand the question. Why does not our correspondent apply to the Apothecaries' Hall, Blackfriars?

E. E.—The address of the Medical Defence Union is 4, Trafalgar-square, London, W.; secretary, Dr. A. G. Bateman.

Dr. T. W. Hime.—The very large number of corrections prevent the insertion of the letter this week.

H. D.—The Royal Meteorological Society, 70, Victoria-street, London, S.W.

COMMUNICATIONS not noticed in our present issue will receive attention in our next.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 3rd, 1900.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Rainfall.	Solar Radiation Vacuo.	Maximum Temp. Shade.	Min. Temp	Wet Bulb.	Dry Bulb.	Remarks at 8.30 A.M.
April 27	29·96	NNE	...	96	53	39	44	47	Hazy
,, 28	30·13	S.E.	...	78	54	41	40	44	Fine
,, 29	29·89	S.W.	...	101	61	39	45	48	Cloudy
,, 30	29·75	W.	0·01	72	57	47	52	53	Raining
May 1	29·98	W.	0·04	102	65	48	47	50	Cloudy
,, 2	29·96	W.	...	113	69	50	51	56	Cloudy
,, 3	29·49	S.W.	...	100	58	50	50	53	Raining

During the week marked copies of the following newspapers have been received: *Scotsman, Western Mail (Cardiff), Brighton Gazette, Belfast Evening Telegraph, Times of India, Pioneer Mail, Citizen, Builder, Architect, Liverpool Daily Post, Daily Argus, Bristol Mercury, West Australian, Northampton Daily Chronicle, Yorkshire Post, Oswestry Advertiser, Leeds Mercury, Melbourne Leader, Birmingham Daily Post, Glasgow Herald, Nottingham Daily Express, South Wales Daily News, Northern Daily Telegraph, Cork Herald, Toronto World, Sanitary Record, Local Government Chronicle, City Press, Hertfordshire Mercury, Mining Journal, Oban Times, Horwich Chronicle, Ripley Advertiser, Loughborough Examiner, Bath Herald, Australasian Medical Gazette, Swansea Journal, Guy's Hospital Gazette, Surrey Advertiser, Burton Chronicle, Isle of Wight Herald, Local Government Journal, Croydon Advertiser, Beverley Recorder, Sussex Daily News, Daily Telegraph, Montgomery County Times, Norfolk Standard, Carnarvon Herald, St. Bartholomew's Hospital Journal, Southampton Times, Salisbury Times, Reading Mercury, &c., &c.*

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY (7th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

TUESDAY (8th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat 2 P.M. and 6 P.M.), Royal Ear (3 P.M.).

WEDNESDAY (9th).—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.)

THURSDAY (10th).—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.).

FRIDAY (11th).—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.).

SATURDAY (12th).—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY (7th).—SOCIETY OF ARTS.—8 P.M. Prof. V. Lewes: The Incandescent Gas Mantle and its Use. (Cantor Lecture.)

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN (40, Leicester-square, W.C.).—7 P.M. Council Meeting. 8 P.M. Casual Communications:—Mr. H. Baldwin, Mr. J. A. Fothergill, and Mr. W. R. Acland. Adjourned Discussion on Mr. J. F. Colyer's paper on the Treatment of Superior Protrusion.

OTOLOGICAL SOCIETY OF THE UNITED KINGDOM (11, Chandos-street, Cavendish-square, W.).—4.30 P.M. Cases will be shown by Mr. F. C. Abbott, Mr. C. A. Ballance, Mr. A. Cheatle, Mr. C. H. Fagge, Dr. D. Grant, Dr. Macnaughton-Jones, Prof. U. Pritchard, Dr. H. Tilley, and Mr. E. Waggett. A discussion will be held on cases shown. Specimens will be shown and Notes of Cases read by Dr. Jobson Horne, Dr. Macnaughton-Jones, Dr. W. Milligan, and Prof. U. Pritchard. The discussion will follow each item.

TUESDAY (8th).—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—Address: Mr. F. Treves and Mr. C. Dent: On the Wounded in the Present War (illustrated by lantern). Sir W. MacCormac will speak.

THURSDAY (10th).—BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—Specimens will be shown by Dr. W. Walter, Dr. W. Ramsay, Dr. A. Giles, Mr. F. Edge, and Mr. F. Jordan. Papers:—Dr. H. Snow: Notes of Two Cases of Vagino-rectal Excision for Cancer.—Mr. R. Morison: Some New Methods of Pelvic Operations in the Female.

NEUROLOGICAL SOCIETY OF LONDON (11, Chandos-street, W.).—8.30 P.M. Pathological Evening. Dr. W. Barrett: Subdural Blood Cyst.—Dr. F. E. Batten: Cyst in Seventh Post-spinal Ganglion associated with Subcutaneous Hæmorrhages following Distribution of the Root.—Dr. Taylor: Changes in the Cells of the Third and Sixth Nuclei from a Case of Ophthalmoplegia Externa. And other Specimens.

FRIDAY (11th).—CLINICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Papers:—Dr. F. E. Batten and Dr. Prickett: A Case of Acute Encephalitis in a Child following Influenza.—Mr. Battle: Three Cases of Choledochotomy.—Mr. Bland-Sutton: On a Case in which a Gall-stone impacted in the Duodenal Orifice of the Common Bile Duct was extracted through an incision in the Bowel, Recovery.—Dr. Parkes Weber: Pneumothorax without Effusion in an apparently healthy man.

BRITISH LARYNGOLOGICAL, RHINOLOGICAL, AND OTOLOGICAL ASSOCIATION (11, Chandos-st., Cavendish-square, W.).—8.30 P.M. Demonstration:—Dr. Macintyre (Glasgow): On the Use of X-rays in Diseases of the Upper Respiratory Tract.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

MONDAY (7th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Pringle: Consultation. (Skin.)

TUESDAY (8th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. R. L. Bowles: Consultation. (Medical.)

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Queen-square, W.C.).—3.30 P.M. Dr. Beevor: Hemiplegia.

WEDNESDAY (9th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—5 P.M. Colonel K. McLeod: Clinical Lecture.

EVELINA HOSPITAL (Southwark-bridge-road, S.E.).—4.30 P.M. Dr. N. Tirard: Clinical Demonstration of Medical Cases. (Post-graduate Course.)

THURSDAY (10th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. J. Hutchinson: Consultation. (Surgical.)

CHARING-CROSS HOSPITAL.—4 P.M. Dr. J. Mitchell Bruce: Cases in the Wards. (Post-graduate Course.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Thursfield: Pathological Demonstration.

FRIDAY (11th).—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. T. Collins: Consultation. (Eye.)

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It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only, AND WHEN ACCOMPANIED BY BLOCKS IT IS REQUESTED THAT THE NAME OF THE AUTHOR, AND IF POSSIBLE, OF THE ARTICLE, SHOULD BE WRITTEN ON THE BLOCKS TO FACILITATE IDENTIFICATION.

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We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

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